

IN THE DAYS OF PELEG

by James P. Dawson

CHAPTER ONE

INTRODUCTION

For many people, the Bible is the most important book ever written, and it has exerted the greatest influence on history of any book ever published. No other book has survived the ravages of time and maintained its literary and contextual integrity as has the Torah of the Bible.

The Bible is actually a compilation of many books, and the Book of Genesis is the foundation of all of them. [1](#) The book describes the creation of the earth and heaven and delineates the generations of man. It lays the foundation for the entire Bible by giving vital information on the origin of all things. Man has no other source of this information outside his own desires and his interpretation of this world. The Bible would be incomplete and incomprehensible to man without Genesis.

The Book of Genesis has received renewed interest in recent decades because of the growth of scientific investigations in the fields of anthropology and archaeology and the search for man's heritage. How old is the earth? When did man appear upon this earth and how did he come into existence? Scientists have proposed several theories. One such theory, the Big Bang Theory, [2](#) proposes that the universe was originally an infinitely compact and singular state enclosing a space even smaller than an atomic particle. The beginning of the universe occurred when the ball grew, not in a violent explosion as the name suggests, but through a rapid expansion. This expansion resulted in the breaking away of the galaxies and planets, and the universe is still expanding. The cosmic microwave background radiation is considered as compelling evidence for the Big Bang Theory. This is all based on the presupposition that the small compact particle existed. But where, how, and when did the particle originate? It is contrary to the First Law of Thermodynamics and all scientific theories that something could be created out of nothing unless a supernatural event occurred to create the particle. The answer to this question, how did this compressed particle come into existence, is not provided. The Bible asserts that God spoke and the creation occurred. The energizing force for creation was God's spoken word. He created a physical world where nothing had existed. This is the supernatural event that is unacceptable to many in the scientific community. It also causes problems for some theologians. Walter Brueggemann writes:

The relation of verses 1 and 2 (Genesis 1:1-2) is not obvious. Verse 1 suggests God began with nothing. Verse 2 makes clear there was an existing chaos. It is likely that verse 2 is a more primitive, traditional notion, whereas 1 is more reflective about its theological claim. By the time of the New Testament, it was affirmed that God created out of nothing (cf Rom. 4:17, Heb.11:3).[3](#)

Science indicates that the earth is billions of years old and man has been on the earth for millions of years, but many people believe that the book of Genesis indicates that the earth and man were created by God in the relatively short past. There are many treatments of the differences of opinion between the creationists and the evolutionists on the age and development of both the earth and man. Many biblical scholars accept the statement of Genesis as to the creation of the universe and man, but indicate that Genesis does not rule out the possibility of large periods of time in the creation process. Benjamin B. Warfield indicates that:

The Bible does not assign a brief span to human history: this is done only by a particular mode of interpreting the Biblical data, which is found on examination to rest on no solid basis. . . . It must be confessed, that the impression is readily taken from a prima facie view of the Biblical Record of the course of human history, that the human race is of comparatively recent origin. [4](#)

Gleason L. Archer evidently does not accept the literal interpretation of the Genesis account of creation and bases his interpretation on the evidence from the fossils and fissionable minerals in the geological strata that indicates the Earth is billions of years old. [5](#) He also states that the interpretation of the Hebrew word "yom" allows for periods of time between the days of creation, and that one cannot be certain that the creation was accomplished in six literal and consecutive solar days as Genesis indicates. Archer states:

To be sure, if we were to understand Genesis 1 in a completely literal fashion - which some suppose to be the only proper principle of interpretation if the Bible is truly inerrant and completely trustworthy - then there would be no possibility of reconciliation between modern scientific theory and the Genesis account. This viewpoint expresses the presuppositions of science on the formation of the earth and accomodates the Bible to science. Archer indicates "[that to take the Word absolutely literally would require that in Matthew 19:24 \(and parallel passages\) Christ actually meant to teach that a camel could go through the eye of a needle.](#)" But it is abundantly clear that Christ did not actually mean to teach that a camel could go through the eye of a needle, but was simply using the familiar rhetorical figure of hyperbole in order to emphasize how difficult it is spiritually for a rich man (because of his pride in his material wealth) to come to repentance and saving faith in God. [6](#)

Interpretation of Scripture is neither an art nor a science; it is both. Biblical interpretation is governed by general rules, principles, and methods of interpretation, but one cannot determine a fixed set of rules that will cover every instance or apply in all circumstances. This ignores context and eliminates the Holy Spirit from the learning and interpreting process. One should adopt an approach to understanding the meaning of words that considers precisely their referential, denotative, connotative, and contextual meanings. In this paper, the phrase "the earth was divided" will be interpreted to mean that the actual earth was physically divided. In contrast, some authors totally ignore this Scripture ([Genesis 10:25](#)), and relate the division of the earth to the flood in Noah's time, some five generations earlier. [7](#) One of the major problems in biblical and in scientific

interpretation is that interpretations are made without having all the data required or considering all the available data. Most difficulties arise because there is insufficient data to make a firm decision.

Thorough and correct scientific inquiry depends upon the premise that there is order in the universe, that all the data are available, and that the presuppositions are correct or at least stated for evaluation. The interrelationship between the Bible, specifically Genesis, and the modern scientific community continues to expand and contrast man's views of the universe and its origin.

Changing Trends in the Interest in Genesis

In spite of changing trends and shifting theological interests, the book of Genesis continues to demand the attention of scholars and scientists throughout the world. [8](#) Brueggemann [9](#) indicated that the first eleven chapters of Genesis are among the most important in Scripture. They are among the best known, but they are frequently the most misunderstood. In these first eleven chapters the creation of the earth is specified, the creation of man defined, and the history of mankind launched. Wiseman [10](#) in his book Ancient Records and the Structure of Genesis presents the evidence for the acceptance of the book of Genesis as an ancient historical document, written by Moses, accepted by the patriarchs, and confirmed through archeological research and literary analyses and methods. The scientific theories on the creation of the universe and the beginnings of man do not attempt to delineate the early generations of man, but the Bible does. The biblical listings of the generations have been shown by historical evidence [11](#) to reflect current beliefs on the births of the nations of the world. Figure 1 illustrates the nations founded by the descendants of Noah.

In the study of Genesis, P. J. Wiseman [12](#) indicates that **"the key to the method of compilation that underlies the structure of the book of Genesis is to be found in understanding of the phrase *These are the generations of . . .*"**



Figure 1 The Nations of Genesis 10

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In the book of Genesis and in the gospel accounts of Matthew and Luke the generations of man from Adam to Jesus are listed, and the debate continues whether these generations can be taken literally. The word "generation" in the Bible may or may not mean an immediate father-son relationship. It may cover many biological father-son generations or a unique father-son relationship. When the Scriptures specify a father-son relationship, it may mean a lineage rather than a biological father-son connection. An example of this is given in Matthew 1:1 which states **"The book of the generation of Jesus Christ, the son of David, the son of Abraham."** This obviously does not mean that Jesus was the biological son of David, but that He came from the lineage of David or was a descendant of David. The connection to David and Abraham designates that the Davidic and Abrahamic covenant have a continuation through this lineage and that the covenant is fulfilled in Jesus Christ.

Special Recognition of Some Patriarchs

Chapter Five of Genesis list the generations of the descendants of Adam through the sons of Noah. The Scripture gives the age of the father when his first son was born, and usually gives the father's age at the time of his death. When the Scriptures specify that one was begot, it is usually taken to mean the fathering of an offspring. However, the Hebrew word, *yalad*, can also mean "in the lineage of." [13](#) The descendants of Noah are listed in Chapter Ten and the listing of descendants is continued in Chapter Eleven.

The Overlapping of the Patriarch's Lives

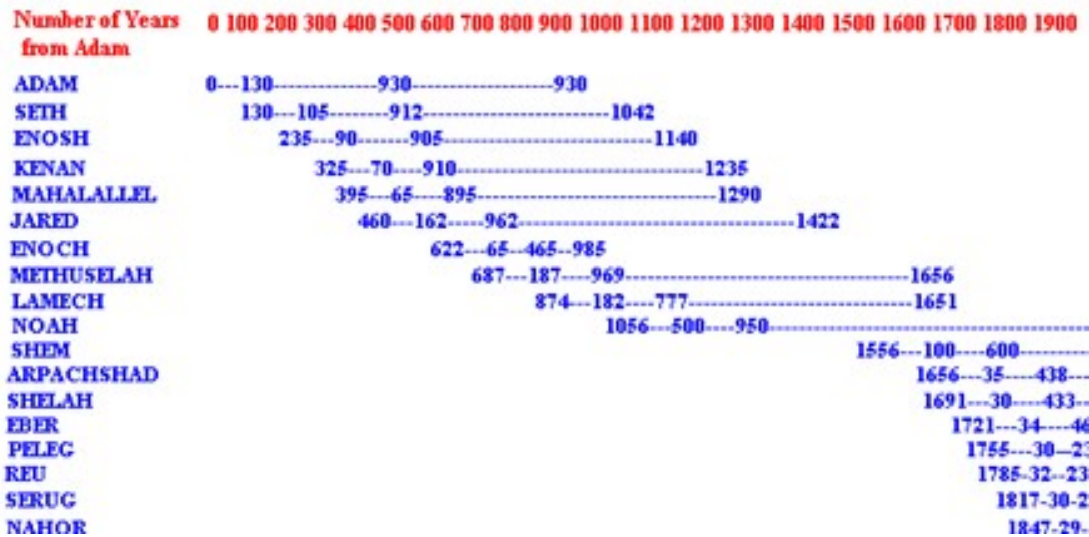
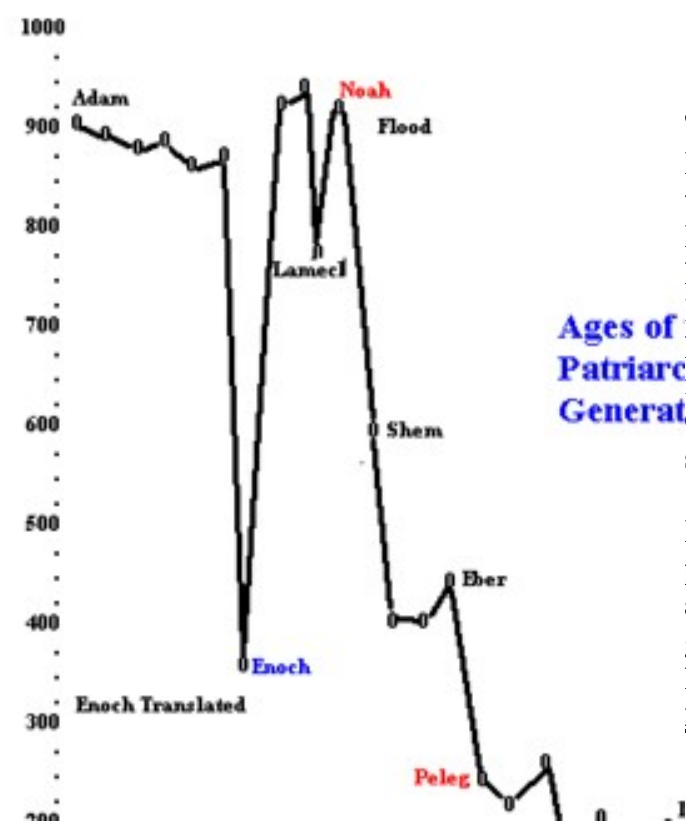


Figure 2 Lifetimes of the Patriarchs in Genesis 10

If one takes the generation listings in Genesis Five, Ten and Eleven literally, then one can compile **Figure 2**, which shows the generations from Adam through Joseph. The age of the father at the time his first son was born, the father's age at the time of his death, and the years from Adam are shown in **Figure 2**. These listings of the generations also point out special occurrences such as in **Genesis 5:22-24** where Enoch is given special recognition. The Scripture says, **"He walked with God,"** and the verbal form denotes **"to live in close fellowship"** and **"communion with God."**¹⁴ He was the father of Methuselah, whose name meant **"when he dies it will come."**¹⁵ This indicates that when Methuselah dies something special would occur, and he lived until about the time of the flood. Jude ¹⁶ states:

And Enoch also, the seventh from Adam, prophesied of these, saying, Behold, the Lord cometh with ten thousands of his saints to execute judgments upon all, and to convince all that are ungodly among them to all their ungodly deeds which they have committed.



The Book of Hebrews [17](#) discloses that by faith Enoch was translated and did not see death. Enoch was truly a unique individual in the list of the Patriarchs. The next man God gave special note was Noah, **"for he found grace in the sight of the Lord,"** [18](#) and he walked with God as did Enoch. Noah was taken from the world as was Enoch. The flood came in the days of Noah. Before Noah's time, God repented that He had made man and He specified that man's life time would be shortened to 120 years. [19](#) **Figure 3** is a plot of the ages of the Patriarchs, and it indicates that the lifetime of 900 plus years ended with Noah. Noah's father died at the age of 777 years, possibly in the flood. Noah's great grandson, Nimrod, was recognized as a mighty hunter and the beginning of his kingdom was Babel. [20](#)

Figure 3 Age of the Patriarchs in Genesis 10

This kingdom led to the tower of Babel, the confusion of the tongues, and the scattering of the people **"abroad upon the face of all the earth."** [21](#) A descendant of Noah's son Shem was Peleg, and the Scriptures again make an additional comment, **"And unto Eber were born two sons: the name of one was Peleg; for in his days was the earth divided."** [22](#) This statement is repeated in I Chronicles 1:19 in the listing of the descendants of Adam. In I Chronicles only Nimrod and Peleg are associated with special comments other than their name. Genesis Eleven tells us why Nimrod received special

comments, but why did God mention that during the days of Peleg "**the earth was divided,**" unless something special and significant took place? Each time comments were added to one of the names of the descendants of Adam something very important took place during his lifetime. These individuals were very prominent in God's plan, such as Abraham, Isaac, Jacob and Joseph. In each of these references to an individual, the event of his day is covered by other Scriptural definitions or explanations. In the case of Peleg, we are told only that in his days the earth was divided.

It is shown in **Figure 3** that when special recognition was given to an individual, a change in lifetime and physical placement occurred. Enoch was translated at an early age, when he was 365 years old, compared to the average lifetime of 900 years of his contemporaries. Enoch was taken from this world to heaven and possibly has a specific task to perform in the future. When the flood came, the lifetime was reduced by approximately 50 percent from Noah to Shem. The flood removed Noah from his country. When the earth was divided, the lifetime was reduced by another 50 percent and the people were removed from their lands and scattered over the face of the earth. The generations from Peleg to Joseph saw another 50 percent reduction in the average lifetime. Abraham was called out of his home, Ur, and told to go to a land he would be shown. Joseph was also removed from the land of his birth and taken to Egypt to prepare for the great famine that was to come. God has placed emphasis on these men because of special circumstances during their life time.

Days of Peleg Comments

The explanations of Genesis 10:25 in several annotated reference or study Bibles are in conflict. [23](#) Some indicate that the land is divided and others that the people are scattered or dispersed. Most Bibles do not give additional information other than that the word Peleg means division. The name Peleg does mean division, but it can also mean an earthquake. [24](#) The word used for "divided" (Hebrew *palag*) [25](#) as used in Genesis 10:25 means literally to split apart, and the word used for "scattered" or "divided" (Hebrew *parad*) as used in Genesis 10:5 means to disperse, break through or separate (oneself). Josephus mentioned that "he was called Phaleg, because he was born at the dispersion of the nations to their several countries; among the Hebrews, Phaleg (Peleg) means division." [26](#) Josephus had no knowledge of the continental drift, and he could not have considered this aspect of the possible meaning of the verse. Most commentaries do not consider or make additional comments on this passage of the earth division in Genesis 10:25.

Donald. G. Barnhouse states,

Some have thought that this verse is the clue to what is known as "continental drift," that the land masses of the earth, originally together, began to separate at this time, and people with original ideas of truth went into every quarter of the globe. Thus, we have the origin of all the pagan myths that parallel the truth of God.

[27](#)

Barnhouse relegates the continental drift idea to a myth and discounts the scattering of the people throughout the earth. This appears to be an unwarranted conclusion from the passage in Genesis 10:25, since there is not any data or Scripture that backs this viewpoint.

A. P. Ross simply states, **"that an event is said to have taken place in the days of Peleg (10:25) would suggest that he too was thought to be an individual,"** [28](#) and Ross does not give any further comment on this verse in Genesis.

G. J. Wenham is of the opinion that Genesis 10:25 refers to the division of the people, Genesis 11:8.

Peleg comes from the root ____, to divide; as a common noun it means *canal, channel*. Here the etymology gives it a more abstract sense, division. Like many biblical names this is prophetic, in that it foreshadows the great events that would take place in Peleg's lifetime. Because in his days, the earth was divided. Here *the earth* denotes the peoples of the world. But in what sense was it divided? Some suggest that the division was between the sons of Peleg. [29](#)

The problem with *the earth* of 10:25 meaning people is that in 1:1 and 1:2 the same Hebrew word, *erets*, is used, and this is before Adam and Eve were created. However, Victor P. Hamilton continues this idea:

Eber's two sons are *Peleg* and *Joktan*. Additional information is provided about Peleg: in his time the earth was divided. Here obviously is but a torso of a much more extensive tradition. Does this comment mean that the Semitic groups were divided into two branches, Pelegites and Joktanites? Or, in the light of the fact that AKK, *palgu* means "canal" or "district," does this information point to a culture hero to whom was attributed the construction of irrigation canals? Or, more likely, does this datum presage the Tower of Babel story in which men were driven away, divided from each other, and forced to settle elsewhere? [30](#)

Henry Morris in his book "The Genesis Record" makes the following statement concerning Genesis 10:25;

If it is ever actually proved that the earth once was a single land mass that somehow split apart, with the segments gradually drifting away to form the present continents, then indeed this verse might be understood to refer to such an event. At present, the question of continental drift is still open among scientists; and creation scientists have pointed to a number of unresolved physical difficulties with the whole idea. [31](#)

The above comments are representative of the divergent opinions and interpretations of this verse in Genesis. But II Timothy 3:16-17 indicates that every verse is suitable for instruction. What, then is the message of Genesis 10:25? The Scriptures are quite clear, **"in the days of Peleg the earth was divided."** The word *erets*, translated earth, in

Genesis 1:1-2 is the same word used in Genesis 10:25 and is usually translated as earth; however, some newer translations interpret the word as **"people"** in Genesis 10:25. If the land was divided in the days of Peleg, then before the days of Peleg it had to be together, a single unit. Genesis 1:9-10 states that the land was gathered together unto one place:

And God said, Let the waters under the heaven be *gathered together unto one place*, and let the *dry land* appear: and it was so. And God *called the dry land Earth*; and he gathering together of the waters called He Seas: and God saw that it was good,

The Hebrew word *qavah*, translated as *gathered together unto*, literally means to bind together or collect. The word *maqowm*, translated *place*, means standing, spot or locality and the word *yam*, translated *seas*, is not necessarily plural, it means a large body of water. [32](#) God gathered the land and the water into single units. In the days of Peleg He divided the land and thus formed the seas (plural).

The question raised by these comments on Genesis 10:25 is: **"Does the special comment about the days of Peleg have specific meaning and reference to the division of the land, and are the Scripture references applicable to the Continental Drift and Plate Tectonic Theories?"** Some authors [33](#) ignore or discount this passage and relate the division of the earth to Noah's flood. However, Scripture indicates the division was in the days of Peleg, five generations later. If the Scripture reference to the division of the earth does apply to the Continental Drift Theory, then the additional questions raised are: **1)** Where is the center of the continental movement and how was the energy delivered that initiated the movement and **2)** does the Scripture specify where the center of the earth is, and does this center correspond to the center of the initial land mass before the movement of the continents? The analyses of the biblical statement, **"in the days of Peleg the earth was divided,"** the scientific theories of the Continental Drift and the Plate Tectonic Theories, and the physical data that are now available will enable one to assist in closing the apparent gap between the biblical and scientific accounts of the creation of the universe and mankind.

When God gives a spiritual truth in Scripture, it enhances our relationship and fellowship with Him and has direct application to our spiritual lives and daily living. When He gives a physical truth, this also has a direct effect on our physical being and application to our lives. What, then, is the direct effect and application of **"the earth was divided?"** The physical anthropological questions are: Was there a direct effect of the displacement of people on the development of countries, governments? Science indicates that *homo sapiens* migrated from the southern part of Africa. [34](#) How does the phrase "the earth was divided" relate to race, [35](#) and to the question of the earth's center? Is there a practical application to our lives of the knowledge that the earth was divided? These questions will be discussed in Chapter 5.

The literature contains many articles and books on the Plate Tectonic Theory and the Continental Drift. These will be reviewed in subsequent chapters to determine the various methods and data used in the development of the theories. A major consideration must be the determination of the presuppositions for either theory and how it compares to the

information obtained from current considerations and Scriptural statements. Also, what does Ezekiel 38:12 [36](#) (RSV) mean by the phrase, "**the center of the earth?**" Judges 9:37 also indicates the "**center of the earth**" in discussing the land of Israel. The word is also translated as "**navel, the center of strength.**" Does this refer to the epicenter of continental movement, the physical center of the land mass before the earth was divided, or to some other type of center? The word used for earth literally means the earth surface. [37](#) The possible "centers of the earth" as related to Israel will be evaluated from both biblical and secular perspectives and related to the center of the continental movement. These centers for evaluation will include but not be limited to:

- Geographical Center.
- Spiritual or Religious Center.
- Physical Anthropology.
- Sociocultural Anthropology.
- Zion and the Garden of Eden.
- Abraham's Covenant and the Land of Promise.

If the analyses of the various data sources and theories indicate that the earth was divided in the days of Peleg, then the question "How does this time frame for the continental drift compare with the scientific literature and currently accepted theories of the Plate Tectonic and Continental Drift Theories?"

Conventional wisdom has essentially ignored the statement in **Genesis 10:25** and has assumed the scientific theory and explanation of the continental drift to be correct.

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15 **J. B. Jackson**, A Dictionary of Scripture Proper Names (Neptune, NJ: Loizeaux Brothers, 1977), 65.

16 **Jude 14,15**. And Enoch also, the seventh from Adam, prophesied of these, saying, Behold, the Lord cometh with ten thousands of his saints, To execute judgment upon all, and to convince all that are ungodly among them of all their ungodly deeds which they have ungodly committed, and of all their hard speeches which ungodly sinners have spoken against him. [Return](#)

17 **Hebrews 11:5**. By faith Enoch was translated that he should not see death; and was not found, because God had translated him: for before his translation he had this testimony, that he pleased God. [Return](#)

18 **Genesis 6:8-9**. But Noah was a pleasure to the Lord. Here is the story of Noah: He was the only truly righteous man living on the earth at that time. He tried always to conduct his affairs according to God's will. And he had three sons - Shem, Ham, and Japheth. [Return](#)

19 **Genesis 6:3**. Then Jehovah said, "My Spirit must not forever be disgraced in man, wholly evil as he is. I will give him 120 years to mend his ways." [Return](#)

Genesis 10:10. The heart of his empire included Babel, Erech, Accad, and Calneh in the land of Shinar. [Return](#) 21 **Genesis 11:9**. That is why the city was called Babel (meaning "confusion"), because it was there that Jehovah confused them by giving them many languages, thus widely scattering them across the face of the earth. [TLB] [Return](#)

22 **Genesis 10:25**. And unto Eber were born two sons: the name of one was Peleg; for in his days was the earth divided; and his brother's name was Joktan. [KJV] [Return](#)

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- 35 **O. Klineberg** , Race Differences (New York: Harper and Brothers, 1935), 188-194. [Return](#)
- 36 **RSV** - "in the center of the earth"; **NASB** - "at the center of the world"; **KJV** - "in the midst of the land"; **NIV** - "the center of the land"; **NCV** - "at the center of the world"; **TLB** - "and the whole earth revolves around them." [Return](#)
- 37 **Strong's Electronic Bible Dictionary** , (1994). [Return](#)

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CHAPTER TWO
CONTINENTAL DRIFT

Background

The idea of a large scale movement and displacement of continents has a long history. About 1800 the German naturalist Alexander von Humboldt, because of the apparent fit of the bulge of eastern South America into the bight of Africa, theorized that the lands bordering the Atlantic Ocean had once been joined. Some 50 years later Antonio Snider-Pellegrini, a French scientist, argued that the presence of identical fossils plants in both North American and European coal deposits could indicate the two continents were formerly connected.

The idea of a large ancient continent, composed of several of the present-day smaller ones, had been put forth in the late 19th century by the Austrian geologist Edward Suess. [38](#) Suess, however, was not thinking of continental drift. He assumed those portions of a single enormous southern continent, designated Gondwana or Gondwanaland, foundered to become the Atlantic and Indian oceans. Sinking continents and vanishing land bridges were frequently invoked in the late 1800s to explain sediment sources apparently present in the ocean and to account for similar floral and faunal connections between continents. This idea remained popular until the 1950s and stimulated people to believe in ancient Atlantis. The idea even made its way into literary works.

In 1908 Frank B. Taylor of the United States invoked the notion of continental collision to explain the formation of some of the world's mountain ranges. The first truly detailed and comprehensive theory of continental drift was proposed in 1912 by Alfred Wegener, [39](#) a German meteorologist, and was published as "Entstehung der Kontinente und Ozeane (The Origin of Continents and Oceans)." Wegener introduced his continental drift proposal by pointing out that the concept of isostasy rendered large sunken continental blocks geophysically impossible. He concluded that if the continents had been once joined together, drifting of their fragments rather than their foundering would have been more probable. The assumption of a former single continent could be tested geologically, and Wegener displayed a large array of data to convince the scientific community. Even today his evidence, ranging from the continuity of fold belts across oceans and similarities of sequences of strata on their opposite sides to paleobiogeographic and paleoclimatological arguments, would be judged worthy of serious consideration. He argued that, if continents could move up and down in the mantle as a result of buoyancy changes produced by erosion or deposition, they should be able to move horizontally as well. The driving forces he considered, however, were unconvincing: both pole fleeing and the westward tidal force appeared to most to be entirely inadequate.

Wegener's proposition was attentively received by many European geologists, and in England Arthur Holmes pointed out that the lack of a driving force was hardly sufficient grounds to scuttle the entire concept. As early as 1929, Holmes proposed an alternative mechanism, convection of the mantle, which remains today a serious candidate for the force driving the plates. Wegener's ideas also were appreciated by geologists in the Southern Hemisphere. The South African, Alexander Du Toit, remained a lifelong believer. After Wegener's death, Du Toit continued to amass further evidence in support of continental drift. Like certain other scientists before him, Wegener became impressed with the physical match in the coastlines of eastern South America and western Africa and he speculated that those lands had once been joined together.

Pangaea



Figure 4 Pangaea

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In about 1910 he proposed that in the Late Paleozoic era (about 240 million years ago) all the present-day continents were connected, and the continents formed a single large mass, or super continent, which had subsequently broken apart. Wegener postulated that throughout most of geologic time there was only one continent which he called Pangaea (from Greek *pangaia*, "all earth"), **Figure 4**. According to this theory, Pangaea was composed of continental sial (granitic rock), which was balanced isostatically in a layer of denser material (basalt), called sima, constituting the uppermost portion of the Earth's mantle. The protocontinent supposedly covered about half the Earth and was completely surrounded by a world ocean called Panthalassa.

Laurasia- Gondwana



Figure 5 Laurasia - Gondwana

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Alexander L. Du Toit, [40](#) a South African geologist, modified Wegener's hypothesis by suggesting two primordial continents: Laurasia in the north and Gondwana in the south. Gondwana, also called Gondwanaland, and the hypothetical former super continent in the Southern Hemisphere, included South America, Africa, peninsular India, Australia, and Antarctica, **Figure 5**. The name was coined by the Austrian geologist Edward Suess [41](#) in reference to the Upper Paleozoic and Mesozoic formations of the Gondwana region of central India, which display typical developments of some of the shared geologic features. Late in the Triassic Period, which lasted from 245 to 208 million years ago, Pangaea fragmented and the parts began to move away from one another.

The westward drift of the Americas opened the Atlantic Ocean, **Figure 6**.



Figure 6 Laurasia Breakup - India Moved

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India supposedly drifted to the North (as Shown in **Figure 6**), crossed the equator and later collided with Asia. Its segments, Laurasia (composed of all the present-day northern continents) and Gondwana (all of the present southern continents) gradually receded, resulting in the formation of the Atlantic Ocean. By contrast, Wegener proposed that Pangaea's constituent portions had slowly moved thousands of miles apart over long periods of geologic time. His term for this movement was *Die Verschiebung der Kontinente* ("continental displacement"), which gave rise to the term continental drift. Wegener found data in the scientific literature for both geological and paleontological evidence that supported his theory. These were closely related fossil organisms and similar rock strata that occurred on widely separated continents, particularly in South America and in Africa. Wegener's theory of continental drift did receive some support, but his speculations on the driving forces behind the continents' movement were not generally accepted. By 1930 his theory had been rejected by most geologists, and it sank into obscurity for the next few decades, only to be resurrected as part of the theory of plate tectonics during the 1960s.

The breakup of Pangaea is now explained in terms of plate tectonics. This theory states that the earth's outer shell, or lithosphere, consists of large rigid plates, which move relative to each other and interact at their margins, where they diverge, converge, or slip past one another (**See Chapter Three, Plate Tectonics**). Pangaea split apart at one of the divergent plate boundaries, and a rift developed beneath the continent. As the two segments of the continent pulled farther apart, molten rock material from the asthenosphere, the layer underlying the lithosphere, flowed upward to fill the void, creating the floor of the new Atlantic Ocean basin. Other scientists had proposed such a continent, but they had explained the separation of the modern world's continents as

having resulted from the subsidence, or sinking, of large portions of the super continent to form the Atlantic and Indian oceans.

The geologic evidence for a former land connection between the currently separated continents and other areas includes the occurrence of tillites (glacial deposits) of Permo-Carboniferous age (the time boundary between the Carboniferous and Permian periods is 286 million years ago) and similar floras and faunas that are not found in the Northern Hemisphere. The widely distributed seed fern *Glossopferis* is particularly cited in this regard. The rock strata that contain this evidence are called the Karroo (Karoo) System in South Africa, the Gondwana System in India, and the Santa Catharina System in South America. The sequence of layered rocks on the land masses that constituted Gondwana is strikingly similar for those time periods when the land masses are believed to have been together. In these areas, glacial deposits are overlain by coal-bearing shales and sandstones containing fossils of *Glossopteris* and *Mesosaurus*, which are in turn overlain by thick sequences of mafic (Basaltic) volcanic rocks.

The idea of Gondwana surfaced again in the scientific community in the 1960s, when evidence of sea-floor spreading from the loci of oceanic ridges proved that the ocean basins are not permanent global features, and these data vindicated Wegener's hypothesis of continental drift. Although the term Gondwanaland or Gondwana does not appear in the modern literature with great frequency, the concept of continental drift and former continental connections is widely accepted.

Modern Interests in Continental Drift Theory

Aside from the congruency of continental shelf margins across the Atlantic, modern proponents of continental drift have amassed impressive geologic evidence to support their views. [42](#) Indications of widespread glaciation from 380 to 250 million years ago are evident in Antarctica, southern South America, southern Africa, India, and Australia. These data have led to the assumption that these continents were adjacent at some point during this time frame. If these continents were once united around the south polar region, this glaciation would become explicable as a unified sequence of events in time and space. Also, fitting the Americas with the continents across the Atlantic brings together similar kinds of rocks and geologic structures. Modern methods of fitting the coastlines consist of computer generated "best fit" maps of the continents at lines of various ocean depths from the actual coast line. One computer generated map proposed by the British geophysicist, E. C. Bullard [43](#) is shown in **Figure 7**.

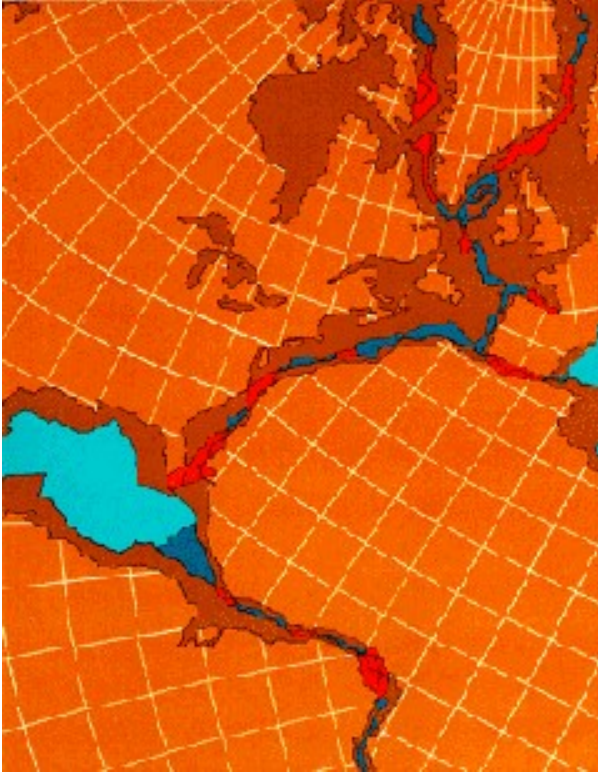


Figure 7 Computer Continent Match

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A belt of ancient rocks along the Brazilian coast, for example, matches one in West Africa. Moreover, along the Atlantic coastlines of either South America or Africa, the earliest marine deposits are Jurassic in age (208 to 144 million years old), suggesting that the ocean did not exist before that time. The problem with these computer generated matches is they ignore the information regarding Central America, the Southeast Asian countries and islands.

Paleomagnetism

The fact that some rocks are strongly magnetized has been known for centuries, [44](#) and geologists recognized more than 100 years ago that many rocks preserve the imprint of the earth's magnetic field as it was at the time of their formation. Volcanic rocks such as basalt are especially good recorders of paleomagnetism, but some sediments also align their magnetic particles with the earth's field at the time of deposition. Investigators have at their disposal fossil compasses that indicate the direction to the magnetic pole and that yield the latitude of their origin. Interest in continental drift increased in the 1950s [45](#) as knowledge of the earth's magnetic field during the geologic past was developed by the studies of the British geophysicists Stanley K. Runcorn, [46](#) P. M. S. Blackett [47](#) and others.

not acceptable, but the paths could be closely aligned by connecting the continents as suggested by Wegener.

Runcorn was one of the first of a new generation of geologists and geophysicists to accept the theory of continental drift. However, most geologists found sufficient reason to doubt the paleomagnetic results due to the conflicting data and to the primitive nature of the early techniques. More sophisticated modern methods are capable of removing the overprint of later magnetization and have made paleomagnetic data strong supporting evidence for continental drift and a major tool for reconstructing the geography of the past.

Seafloor Spreading

Investigations of oceanic magnetic anomalies corroborate the seafloor spreading hypothesis. These investigations show that the strength of the geomagnetic field is alternately anomalously high and low with increasing distance away from the axis of the midocean ridge system.

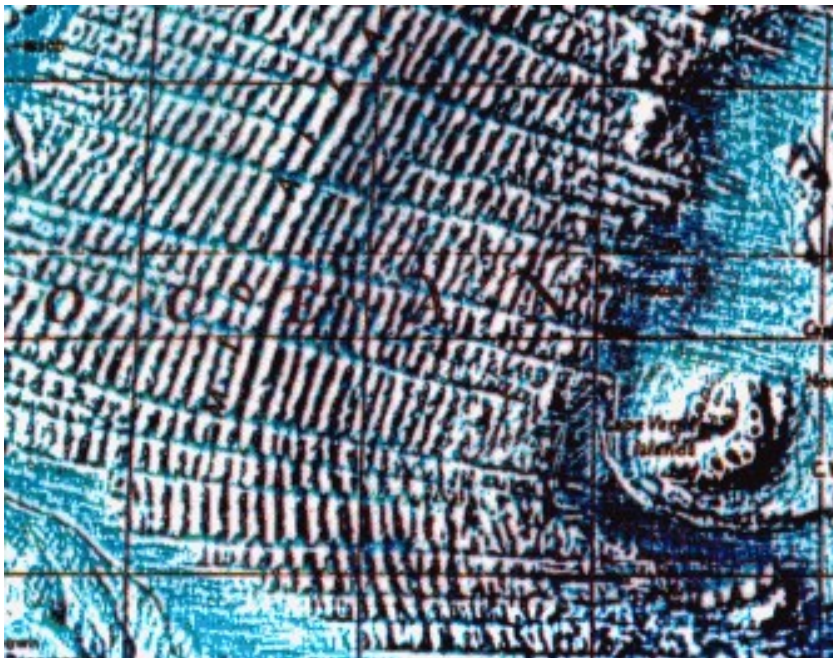


Figure 9 Sea-Floor Spreading

Reproduced from World Physical/Ocean Floor Map, by permission from the National Geographic Society.

The anomalous features are nearly symmetrically arranged on both sides of the axis and parallel the axis, creating bands of parallel anomalies, as shown in **Figure 9**. Measurements of the thickness of marine sediments and absolute age determinations of such bottom material have provided additional evidence for seafloor spreading. The oldest sediments so far recovered by a variety of methods, including coring, dredging, and deep-sea drilling, dated only to the Jurassic Period -- that is, they do not exceed 208 million years in age. Such findings are incompatible with the doctrine of the permanency

of the ocean basins that had prevailed among earth scientists for many years. In the 1920's the study of sea-floors was greatly enhanced when sonar was modified to measure ocean depths. Submarine topography could be surveyed, and the seafloor was mapped as shown for the North Atlantic in **Figure 9**. The adaption of airborne magnetometers enabled geophysicists to record variations in geomagnetic intensity and orientation. The magnetometric measurements were also conducted by ship borne units, and the midocean ridges showed that the rocks on one side of the ridge produced a mirror geomagnetic image of the other side.

It also revealed that there was not any marine sediment at the ridge crests, but that it did appear on the down slopes of the ridges. These observations led to the conviction that the ridge is where new ocean crust is being created. It is carried up by convection currents as hot lava, but it is rapidly cooled and consolidated on contact with the cold, deep-ocean water. This is illustrated in **Figure 10**. This creation of new ocean floor forces the continents to move away from the ridges, causing the continents to drift. [51](#) Increased knowledge of the floor configurations and the subsequent formulation of the concepts of seafloor spreading and plate tectonics provided further support for continental drift. During the early 1960s the American geophysicist Harry H. Hess [52](#) incorporated these data into his proposed model for Seafloor Spreading. He proposed that new oceanic crust is continually generated by igneous activity at the crests of midocean ridges. These ridges are submarine mountains that follow a sinuous course of about 37,000 miles along the bottom of the major ocean basins. Molten rock material from the earth's mantle rises upward to the crests, cools, and is later pushed aside by new intrusions, as shown in Figure 10. As the magma cools, it is pushed away from the ridges.

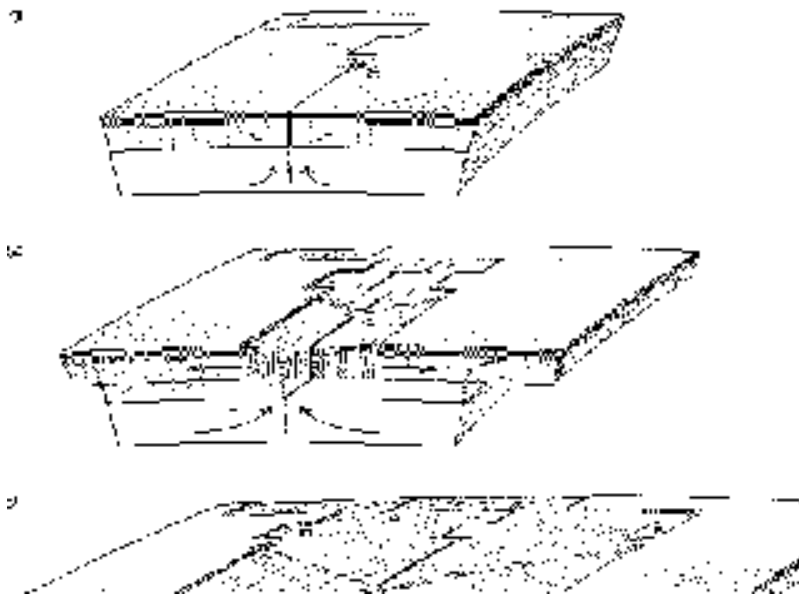


Figure 10 Plate Slipping

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This spreading creates a successively younger ocean floor, and the flow of material is thought to bring about the migration, or drifting apart, of the continents. The ocean floor is thus pushed at right angles and in opposite directions away from the crests. This idea played a pivotal role in the development of plate tectonics. Wherever continents are bordered by deep-sea trench systems, as in the Pacific Ocean, the ocean floor is plunged downward, under thrusting the continents and ultimately reentering and dissolving in the earth's mantle from which it originated.

There is impressive evidence that supports the seafloor spreading hypothesis. Studies conducted with thermal probes indicate that the midocean ridges have a heat flow through bottom sediments of up to four times greater than that which flows through the continents. [53](#) These high values reflect the intrusion of molten material near the crests of the ridges. Research has also revealed that the ridge crests are characterized by anomalously low seismic-wave velocities which can be attributed to thermal expansion and micro fracturing associated with the up-welling magma.

Hess's Seafloor Spreading Model

The existence of these three types of striking, large seafloor features, which had gradually become evident during the late 1940s and 1950s, clearly demanded a global rather than local tectonic explanation. The first comprehensive attempt at such an explanation was made by Harry H. Hess [54](#) of the United States. In this paper Hess, drawing on Holmes's model of convective flow in the mantle, suggested that the mid-ocean ridges were the surface expressions of rising and diverging convective flow while trenches and Benioff zones with their associated island arcs marked descending limbs, **Figure 11**.

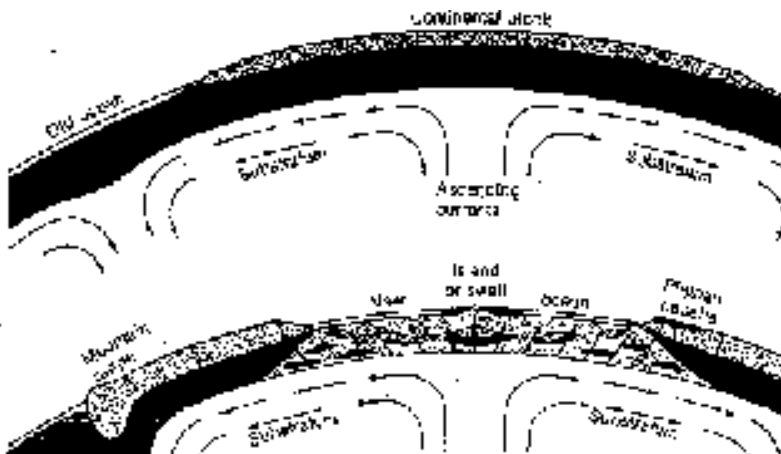


Figure 11 Seafloor Formation & Spreading

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At the ridge crests, new oceanic crust would be generated and then carried away laterally to cool, subside, and finally be destroyed in the nearest trenches. Consequently, the age of the oceanic crust should increase with distance away from the ridge crests, and because recycling was its ultimate fate, very old oceanic crust would not be preserved anywhere. This explained why only rocks younger than Mesozoic had ever been encountered in the

oceans, whereas the continents bore ample evidence of the presence of oceans for more than three billion years. Hess' model, later dubbed seafloor spreading by the American oceanographer Robert S. Dietz, [55](#) appeared to account for most observations and was favorably received by marine geologists. Confirmation of the production of oceanic crust at ridge crests and its subsequent lateral transfer was not long in coming. Fracture zones had thus far been widely regarded as transcurrent faults that gradually displaced one crustal block to the right or left relative to the other, **Figure 12**.

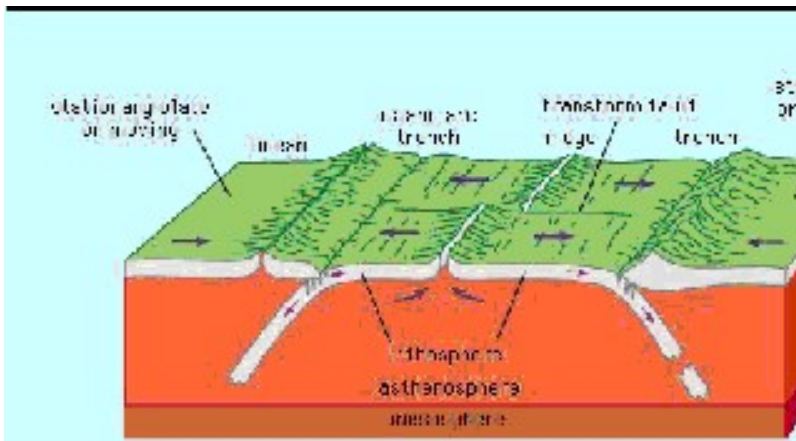


Figure 12 Continental Drift and Transform Faults

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Given this interpretation, the abrupt termination of many fracture zones against continental margins raised intractable problems. J. Tuzo Wilson, [56](#) the Canadian geologist, solved these problems in 1965 by arguing that the offset between two ridge crest segments is present at the outset. Each segment generates new crust which moves laterally away. Along that part of the fracture zone lying between crests, the crustal slabs move in opposite directions, even though the axes or rift valleys themselves remain stationary. Beyond the crests, adjacent portions of crust move in parallel and are eventually absorbed in a trench.

Wilson called this a transform fault and noted that on such a fault the seismicity should be confined to the part between ridge crests, as is indeed the case, Figure 12. Shortly afterward, Lynn R. Sykes, [57](#) an American seismologist, showed that the motions deduced from earthquakes on transform faults conform to the directions of motion postulated by Wilson and are opposite to those observed on a transform fault.

The seafloor-spreading model also specifies that the oceanic crust increases in age as a function of distance from the ridge axis. Wilson had already pointed out that volcanic islands in the Atlantic indeed show this pattern. [58](#) It is in the nature of these piles of lava and ash that the moment of their birth is difficult to ascertain. Additional evidence was needed, and it soon came from magnetic surveys of the oceanic crust.

A magnetic survey of the eastern Pacific floor off the coast of Oregon and California had been published in 1961 by two geophysicists, Arthur D. Raff and Ronald G. Mason. [59](#)

The results were puzzling and gave rise to many farfetched interpretations. On the continents, magnetic anomaly patterns tend to be confused and seemingly random except on a fine scale, but the seafloor possesses a remarkably regular set of magnetic bands along the ocean ridges, Figure 9, and are alternately higher and lower than the average earth field. These positive and negative anomalies are strikingly linear and parallel with the mid-ocean ridge axis and show distinct offsets along fracture zones. The axial anomalies tend to be higher and wider than the adjacent ones, and they approximate a mirror image of that on the other as described earlier.

In his convection, seafloor-spreading model, Hess had attributed the formation of the oceanic crust mainly to the hydration of a peridotitic mantle, a process not judged likely to produce such regular magnetic anomalies. It also seemed possible that partial melting of the mantle would yield a basaltic magma, which would be a much better medium for retaining a strong imprint of the Earth's magnetic field upon solidification. This second hypothesis has since been confirmed by deep-sea dredging and drilling. It has been known since early in the century that the polarity of the earth's magnetic field reverses from time to time. [60](#) Studies of the remanent magnetism of stacks of basalt lavas extruded in rapid succession on land had, since the late 1950s, begun to establish a sequence of reversals dated by isotopic methods.

The Vine-Matthews Hypothesis.

Assuming that the oceanic crust is indeed made of basalt intruded in an episodically reversing geomagnetic field, Drummond H. Matthews of Cambridge University and a research student, Frederick J. Vine, [61](#) postulated in 1963 that the new crust would assume a magnetization aligned with the field at the time of its formation. If the field were normal, the magnetization of the crust would be added to that of the earth and produce a positive anomaly. If intrusion had taken place during a period of reverse magnetic polarity, it would subtract from the present field and appear as a negative anomaly. Subsequent to intrusion, each new block would split and the halves in moving aside would generate the observed bilateral magnetic symmetry. Given a constant rate of crustal generation, the widths of individual anomalies should correspond to the intervals between magnetic reversals. Correlation of magnetic traverses from different mid-ocean ridges demonstrated in 1966 an excellent correspondence with the magnetic polarity-reversal time scale just then published by the American geologists Allan Cox, [62](#) Richard Doell, and Brent Dalrymple [63](#) in a series of timely papers. This reversal time scale went back some three million years, but further extrapolation based on marine magnetic anomalies (confirmed by deep-sea drilling) has extended the magnetic anomaly time scale far into the Cretaceous period, which spanned from about 144 to 66.4 million years ago. These time scales are based on the isotopic decay of the material. [64](#)

These confirmations persuaded a large number of marine geologists that seafloor spreading was a reality. However, they focused mainly on the explanations that the concept provided for a host of oceanic features, not on the continental drift. Land geologists were disinterested, viewing the affair as primarily an issue for their marine colleagues.

Two concerns remained. The spreading seafloor was generally seen as a thin skin, and the boundary between the crust and mantle was considered of such major importance in the early 1960s that plans were undertaken to sample it by deep drilling in the oceans. If only oceanic crust were involved as seemed to be the case in the Pacific Ocean, the thinness of the slab was not disturbing, even though the ever-increasing number of known fracture zones with their close spacing implied oddly narrow, long convection cells. More troubling was the fact that the Atlantic Ocean, though it had a well-developed mid-ocean ridge, lacked trenches adequate to dispose of the excess oceanic crust. There the adjacent continents needed to travel with the spreading seafloor, a process that, given the thin but clearly undeformed slabs, strained credulity.

By the late 1960s several American investigators, among them Jack E. Oliver [65](#) and Bryan L. Isacks, [66](#) had integrated this notion of seafloor spreading with that of drifting continents and formulated the basis of plate tectonic theory. The mid-ocean ridges occur along some of the plate margins. The lithospheric plates separate and the up-welling mantle material forms a new ocean floor along the trailing edges. As the plates move away from the flanks of the ridges, they carry the continents with them.

On the basis of all these factors, it may be assumed that the Americas were joined with Europe and Africa until approximately 190 million years ago, when a rift split them apart along what is now the crest of the Mid-Atlantic Ridge. Subsequent plate movements averaging about 2 cm (0.8 inches) per year have brought the continents to their present position. More recent measurements by NASA [67](#) indicate the movement is much greater in some areas and is slowing down in others. It is believed that this breakup of a single land mass and the drifting of its fragments is the latest in a series of similar occurrences throughout geologic time.

John Tuzo Wilson, a Canadian geologist and geophysicist, established global patterns of faulting and the structure of the continents. His studies in plate tectonics have had an important bearing on the theories of continental drift, seafloor spreading, and convection currents within the earth. In the early 1960s Wilson became the world's leading spokesman for the revived theory of continental drift at a time when prevailing opinion held that continents were fixed and immovable. His paper, entitled "A New Class of Faults and Their Bearing on Continental Drift (1965)," [68](#) introduced the concept of the transform fault. Previous theories of continental drift had conceived of plates as moving either closer together (convergent plates) or further apart (divergent), but Wilson asserted that a third kind of movement existed whereby plates slide past each other. This theory became one of the bases for plate tectonics which revolutionized the geophysical sciences in the 1970s.

Conclusions on the Continental Drift Theory

The concept of continental drift has been shown to have merit. Studies in Paleomagnetism and Sea-floor Spreading have indicated that the land masses or continents were connected at some point in the past. However, the theory does not account for the anomalous movements of some areas, for example, the Caribbean and

Italy. The scientific community has generally accepted the presuppositions that:

- 1) There was a single super continent in the past, prior to the Triassic Period (245 to 208 million years ago), Pangaea, or a variation of this continental model.
- 2) That the super continent fragmented during the Jurassic period (208 to 144 million years ago).
- 3) The distribution of plants and animals support this theory.
- 4) The center of the continental drift was the southern tip of Africa as shown in Figures 4, 5, 7 and 8.
- 5) Time frames are based on radioactive decay, index fossils and existing strata definitions.

There are two questions remaining that have not been answered.

- 1) No explanation for the cause of the initial movement of the continents is provided.
- 2) If the sea floor spreading is causing the continents to drift, then the actual mechanism needs further study for definition of the specific interactions. It appears that the sea floor spreading is the result of the continental drift and not the cause.

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IN THE DAYS OF PELEG

by James P. Dawson

CHAPTER THREE PLATE TECTONIC THEORY

Introduction

Plate tectonics, a theory of the dynamics of the Earth's outer shell, the lithosphere, rests on geologic and geophysical data, and dominates current thinking in the Earth sciences. The Plate tectonic theory suggests that the lithosphere consists of about a dozen large plates and several small ones, each moving in a predetermined manner. These moving plates interact at their boundaries, where they diverge, converge, or slip relatively harmlessly past one another, **Figure 13**. These interactions are responsible for most of the seismic and volcanic activity of the earth, although earthquakes and volcanoes do occur in plate interiors. The moving plates cause mountains to rise where they push together, and continents to fracture and oceans to form where they pull apart. The continents sitting passively on the backs of plates drift with them and thereby bring about continual changes in the earth's geography.

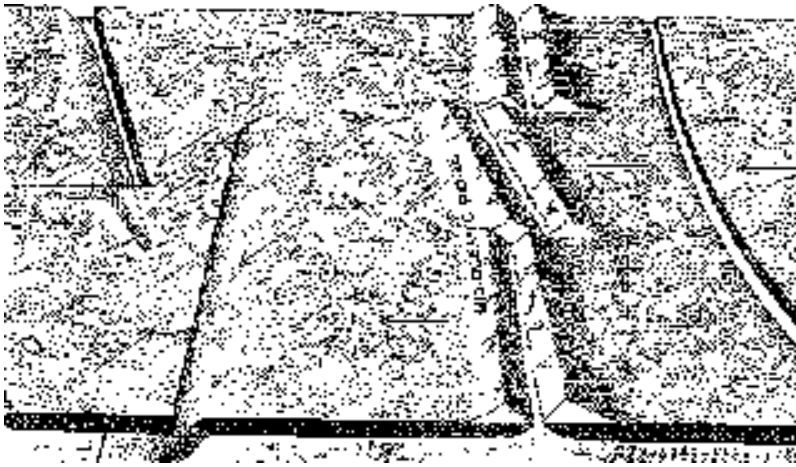


Figure 13 Moving Plates

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The theory of plate tectonics formulated during the late 1960s is now almost universally accepted and has had a major impact on the development of the earth sciences. Its adoption represents a true scientific revolution, analogous in its consequences to the Bohr atomic models in physics or the discovery of the genetic code in biology. Incorporating the much older idea of continental drift, the theory of plate tectonics has made the study of the Earth more difficult by doing away with the notion of fixed continents, but it has at the same time provided the means of reconstructing the past geography of continents and

oceans.

Historical Overview

Any major new idea in science appears to lead instantly to a search of the past for those who might once have proposed similar concepts. In the case of plate tectonics, the primary candidate is obvious: Alfred Wegener of Germany who explicitly presented the concept of continental drift for the first time at the outset of the 20th century. ⁶⁹ Though plate tectonics is by no means synonymous with continental drift, it encompasses this idea and derives much of its impact from it. The theory of plate tectonics has revolutionized much of the thinking by Earth Scientists since the late 1960s and early 1970s. It has served as a unifying model for explaining geologic phenomena that were formerly considered in unrelated fashion. Plate tectonics describes seismic activity, volcanism, mountain building, and various other earth processes in terms of the structure and mechanical behavior of a small number of enormous rigid plates thought to constitute the outer part of the planet, the lithosphere. This all-encompassing theory grew out of observations and ideas about continental drift and seafloor spreading. Most of the considerations in Chapter 2 on the Continental Drift can be applied to the theory of Plate Tectonics.

In the early 1960s studies of the ocean floor provided insight to explain the continental drift and plate tectonic theories. First, the American geophysicists Harry H. Hess ⁷⁰ and Robert S. Dietz ⁷¹ suggested that new ocean crust was formed along mid-oceanic ridges between separating continents. Second, Drummond H. Matthews ⁷² and Frederick J. Vine ⁷³ of Britain proposed that the new oceanic crust acted like a magnetic tape recorder insofar as magnetic anomaly strips parallel to the age had been magnetized alternately in normal and reversed order, reflecting the changes in polarity of the earth's magnetic field. This theory of seafloor spreading was tested by the major advances in deep-water drilling technology. The Mohole Project was initiated in the late 1950s to test the feasibility of tapping the thermal energy of the earth's interior. The project was designed to drill through 18,000 feet of crust below 14,000 feet of water off the coast of South America, **Figure 14.**

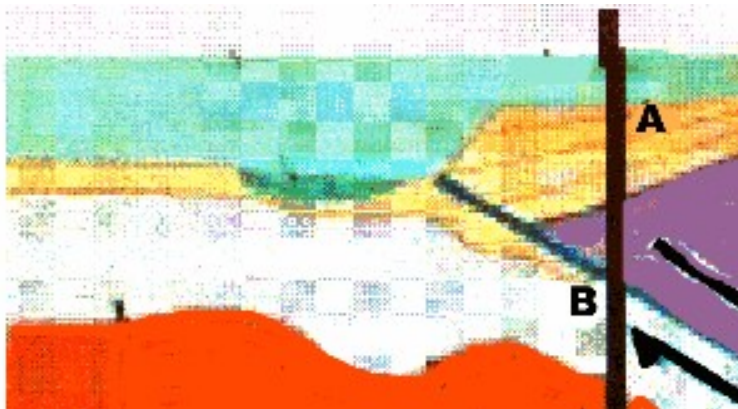


Figure 14 Mohole Project

According to the literature, the project was canceled for "money and political reasons." [74](#) However, the main reason Mohole was terminated was because the project was proved not feasible in this location. As the South American plate moved toward the west, the ocean floor was being subducted, Figure 14. As the drilling proceeded past point A, it encountered a movement to the west in the subsurface, but as it passed point B the movement of the subsurface was toward the east. This resulted in continual binding of the drill stem and required redrilling and finally abandonment of the project. The Joint Oceanographic Institutions Deep Earth Sampling (JOIDES) project began in 1969, continued with the Deep Sea Drilling Project (DSDP) and since 1976 with the International Phase of Ocean Drilling (IPOD) project. [75](#) These projects have produced more than 500 boreholes in the floor of the world's oceans, and the results have been as outstanding as the plate-tectonic theory itself. They confirm that everywhere the oceanic crust is younger than about 200,000,000 years and that the stratigraphic age determined by micropaleontology of the overlying oceanic sediments is close to the age of the oceanic crust calculated from the magnetic anomalies.

The plate-tectonic theory which embraces both the continental drift and seafloor spreading was formulated in the mid-1960s by the Canadian geologist J. Tuzo Wilson, [76](#) who described the network of mid-oceanic ridges, transform faults, and subduction zones as boundaries separating an evolving mosaic of enormous plates. He also proposed the idea of the opening and closing of oceans and eventual production of an orogenic belt by the collision of two continents.

Up to this point no one had considered in any detail the implications of the plate-tectonic theory for the evolution of continental orogenic belts; most thought had been devoted to the oceans. In 1969 John Dewey [77](#) of the University of Cambridge outlined an analysis of the Caledonian-Appalachian orogenic belts in terms of a complete plate-tectonic cycle of events, and this provided a model for the interpretation of other pre-Mesozoic (Paleozoic and Precambrian) belts.

In 1968, W. Jason Morgan [78](#) introduced the concept of plate tectonics in which the earth's crust is considered to be divided into a series of rigid plates bounded by mid-oceanic ridges, oceanic trenches, great faults, and active fold belts. According to this theory the movements of the continents and the sea-floor spreading are part of large-scale movements of plates and are not the "cause-effect" as proposed by other scientists.

Gestation and Birth of the Plate Tectonics Theory

When Wegener developed his idea relatively little was known regarding the nature of the ocean floor. After World War II, however, rapid advances were made in the study of the relief, geology, and geophysics of the ocean basins. Due in large part to the efforts of Bruce C. Heezen and Henry W. Menard [79](#) of the United States, these features which constitute more than two-thirds of the earth's surface became well enough known to permit serious geologic analysis. Several major topographic and tectonic features distinguish the ocean basins from the continents. The first of these is the mid-ocean ridge system. Mid-ocean ridges are broad, elongated elevations of the ocean floor rising to about 1.5 or 2 miles below sea level with widths ranging from a few hundred to more than 500 miles.

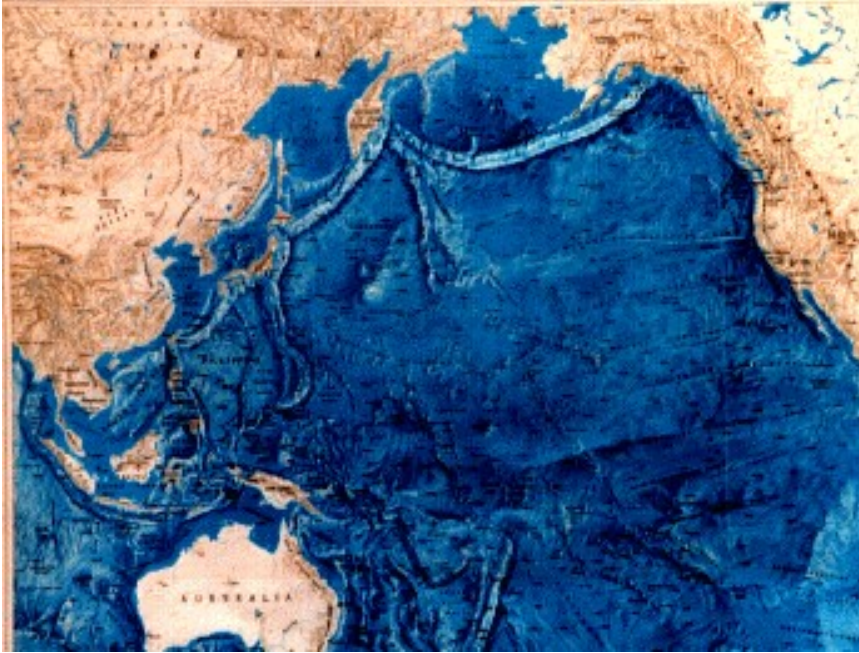


Figure 15 Trenches in the Pacific

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Their crests tend to be rugged and are often endowed with a longitudinal rift valley where fresh lava flows, high heat flows, and shallow earthquakes of the extensional type are found. Mid-ocean ridges nearly girdle the globe. Trenches constitute another type of seafloor feature. In contrast to mid-ocean ridges, they are long, narrow depressions containing the greatest depths of the ocean basins. Trenches virtually ring the Pacific; a few also occur in the northeastern part of India, and some small ones are found in the Atlantic, **Figure 15**, but elsewhere they are absent. Trenches have low heat flow, are often filled with thick sediments, and lie at the upper edge of the Benioff zone of compressive earthquakes. Trenches border continents, as in the case of western Central and South America, but they also may occur in mid-ocean, as, for example, in the southwestern Pacific.

Mid-ocean ridges and, more rarely, trenches are offset by fracture zones, **Figure 16**. These are transverse features consisting of linear ridges and troughs approximately perpendicular to and offset by a few to several hundred miles from the ridge crest. Fracture zones often extend over long distances in the ocean basins but generally end abruptly against continental margins. They are not volcanic, and their seismic activity is restricted to the area between offset ridge crests where earthquakes indicating horizontal slips are common.

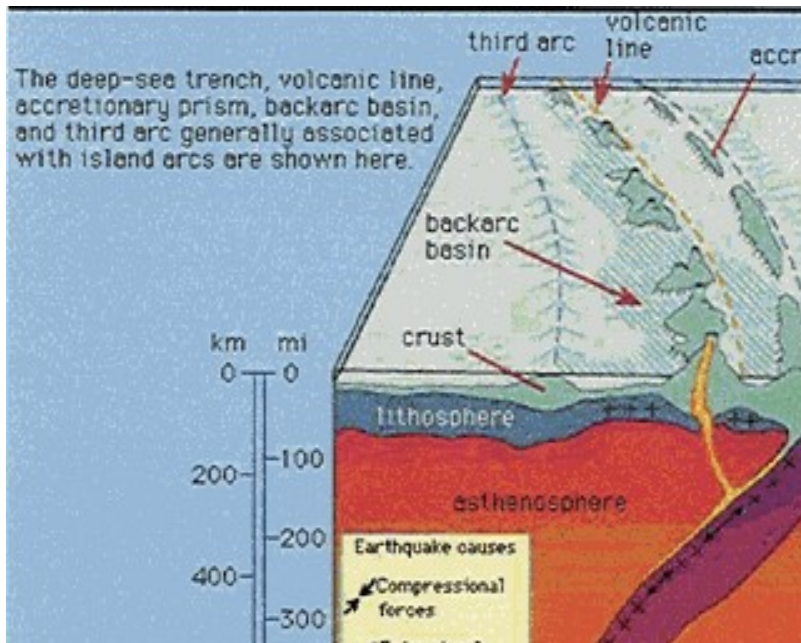


Figure 16 Formation of Trenches from Subduction

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Plate Motion.

The movement of a plate across the surface of the Earth can be described as a rotation around a pole, and it may be rigorously described with the theorem of spherical geometry formulated by the Swiss mathematician Leonhard Euler during the 18th century. Similarly, the motions of two plates with respect to each other may be described as rotations around a common pole, provided that the plates retain their shape, **Figure 17**.

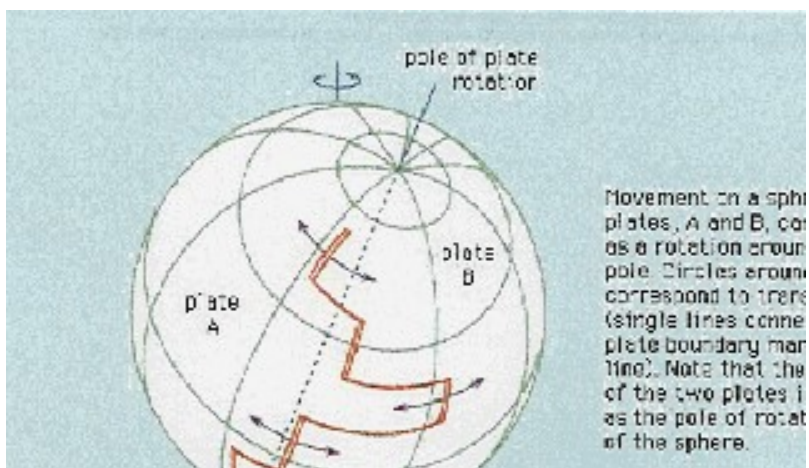


Figure 17 Rotation of Plates Around a Pole

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The requirement that plates are not internally deformed has become one of the postulates of plate tectonics. It is not totally supported by evidence, but it appears to be a reasonable approximation of what actually happens in most cases and is needed to permit the

mathematical reconstruction of past plate configurations. The joint pole of rotation of two plates can be determined from their transform boundaries and from their divergent plate boundaries usually by means of magnetic anomalies. Because all plates form a closed system, all movements can be defined by dealing with them two at a time. It is conceivable that the entire lithosphere might slide around over the asthenosphere like a loose skin, altering the positions of all plates with respect to the spin axis of the earth and the equator. To determine the true geographic positions of the plates in the past which is so important in paleoclimatology and paleoceanography, investigators have to define their relative motions not to each other but rather to this independent frame of reference. The hot spot island chains serve this purpose; their trends provide the direction of motion of a plate. The speed of the plate can be inferred from the increase in age of the volcanoes along the chain. [80](#) It is assumed that the hot spots themselves remain fixed with respect to the earth, an assumption that appears to be reasonably accurate for at least some hot spots.

Another method of determining absolute plate movements relies on the fact that the equatorial waters of the ocean are and always have been very fertile. The high biological productivity yields an enormous quantity of calcareous microfossils, which like a gigantic natural chalk line, marks a narrow equatorial zone. The displacement of the equatorial deposits over time, traced by means of deep-sea drill cores, enables investigators to determine the direction and rate of plate movement. The development of the satellite and the Global Positioning Systems have enabled scientists to measure with some degree of accuracy these plate movements, and these data are also used to determine by extrapolation the past positions of the plates. The GPS measurements are most cost effective and yield greater quantities of reliable data. These GPS data were not available until this decade.

Because the plates all interlock, any change in motion anywhere must reverberate throughout the entire system. If two continents collide, their edges will crumple and shorten, but eventually all motion must stop at this boundary and adjustments will be required in other parts of the system. Earth scientists are thus able to reconstruct the positions and movements of plates in the past so long as they have the ancient oceanic crust to provide them with plate speeds and directions, and these data can be verified by satellite measurements. Since old oceanic crust is continuously consumed to make room for new crust, this kind of evidence is eventually exhausted. The oceanic crust is younger than the Jurassic, the geologic age that began approximately 208 million years ago, and this method fails to define the history of drifting continents during earlier geologic periods.

Early Plate Activity.

Whatever the forces may be that drive the plates, they consume energy. It is postulated that by far the largest part of this energy is derived from the decay of radioactive isotopes within the earth, and the energy flow has therefore declined through the 4.5 billion years of the earth's history -- rapidly at first and then at a slowly diminishing though not a negligible rate. Accordingly, it is quite likely that the behavior of the lithospheric plates on the early, more energetic earth was different from what it is today, and what prevails

at present will certainly differ from what will prevail in the future. A thickening lithosphere, a decreasing heat flow, a temperature gradient that decreases with depth within the earth, and enlarging convection cells in the mantle have all been postulated as unidirectional changes that affected the behavior of the lithosphere. Any of these events or some combination may be the driving force of the plate movement. But they could also be the results of such movement and not the driving force. It is possible that the initial plates were too small, too hot, and hence too light to be subducted. In this case, the first subduction would mark the coming of age of classical plate tectonics, and, indeed, clear evidence is lacking for subduction until rather late in the Precambrian period. The evidence that bears on the existence, nature, and movements of the plates during the first several billion years of earth history are very limited. The continental nuclei of the early and middle Precambrian seem to have been small plates on a more vigorously convecting mantle, though admittedly other explanations are equally possible. These nuclei are thought to have been embedded in strongly deformed complexes of sediments and basic igneous rocks. However, in most cases, paleomagnetic data do not leave room for the existence of sizable oceanic areas between such nuclei. Investigators are thus forced to contemplate the possibility that in the Precambrian Period intensive deformation took place within plates, because of higher flow of heat toward the surface. On the other hand, current knowledge of this long but obscure portion of earth history is so deficient that some geologists have emphatically denied that there might have been a remote past to which classical plate tectonics could not be applied.

Plate Boundaries.

As conceived by the theory of plate tectonics, the lithospheric plates are much thicker than the oceanic or the continental crust; their boundaries do not usually coincide with those between oceans and continents; and their behavior is only partly influenced by whether they carry oceans, continents, or both. For example the Pacific Plate is purely oceanic, but most of the others contain continents, as shown in **Figure 18**.



Figure 18 World Wide Plate System

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At a divergent plate boundary, magma wells up from below as the release of pressure produces partial melting of the underlying mantle and generates new crust and, because the partial melt is basaltic in composition, the new crust is oceanic. Diverging plate boundaries, even if they originate within continents, eventually come to lie in ocean basins of their own making. Most divergent plate boundaries are found within continents rather than in oceans because a weak layer is sandwiched between two stronger ones and this renders the continental crust more vulnerable to fragmentation than its oceanic counterpart. This may be the reason for the basin type areas in North America between the Appalachian and Rocky mountains and the desert area between the Rockies and the Sierras in the plains states which would enhance the possibility of this idea, **Figure 19**.



Figure 19 Basins within the Continental U.S.

Reproduced from World Physical/Ocean Floor Map,
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The presence of the Great Salt Lake and the Salton Sea would indicate that at one time there may have been an ocean between the Rockies and the Sierra Nevada Mountains. The creation of the new crust is normally restricted to ocean areas and accompanied by much volcanic activity and by many shallow tension earthquakes as the crust repeatedly rifts, heals, and rifts again. . The continuous formation of new crust produces an excess that must be disposed of elsewhere. This is accomplished at convergent plate boundaries where one plate descends -- i.e., is subducted -- beneath the other. At depths between 150 and 400 miles, the subducted plate melts and is recycled into the mantle. The plates form an integrated system that completely covers the surface of the earth, and the total amount of crust generated equals that destroyed. It is not necessary that new crust formed at any given divergent boundary be completely compensated at the nearest subduction zone. It is in subduction zones that the difference between plates carrying oceanic and continental crust can be most clearly seen, **Figure 20**.

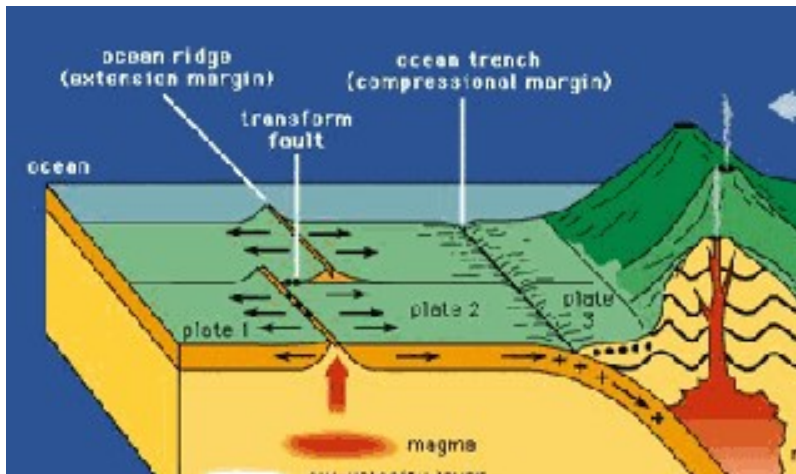


Figure 20 Subducted Plates

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If both plates have oceanic edges, either one may dive beneath the other; but if one carries a continent, the greater buoyancy prevents this edge from sinking. Thus it is invariably the oceanic plate that is subducted. Continents are permanently preserved in this manner, while the ocean floor continuously renews itself. If both plates possess a continental edge, neither can be subducted and a complex sequence of events from crumpling under and over thrusting raises lofty mountain ranges. Much later, after these ranges have been largely leveled by erosion, their remains continue as a reminder that this is the "suture" where continents were once fused. The subduction process which involves the descent into the mantle of a slab of cold rock about 60 miles thick is marked by numerous earthquakes along a plane inclined 30 to 60 degrees into the mantle -- the Benioff zone. Most earthquakes in this planar dipping zone result from compression, and the seismic activity extends 150-400 miles below the surface. At a depth of 60 miles or more, the subducted oceanic sediments together with part of the upper basaltic crust melt to an andesitic magma which rises to the surface and gives birth to a line of volcanoes a few hundred kilometers behind the subducting boundary, **Figure 20**. This boundary is usually marked by an oceanic deep, or trench, where the overriding plate scrapes off the upper crust of the lower plate to create a zone of highly deformed, largely sedimentary rock. If both plates are oceanic, the deformed sediments and volcanoes form two island arcs parallel to the trench. If one plate is continental, the sediments are usually accreted against the continental margin and the volcanoes form inland, as they do in Mexico or western South America.

Along the third type of plate boundary, **Figure 21**, two plates move laterally and pass each other without creating or destroying crust. Large earthquakes are common along such strike-slip, or transform, boundaries. Also known as fracture zones, these plate boundaries are perhaps best exemplified by the San Andreas fault in California and the North Anatolian fault system in Turkey.

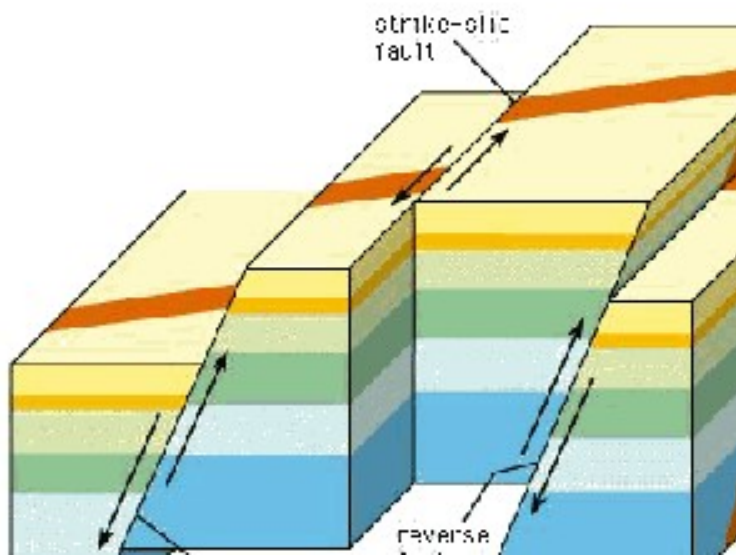


Figure 21 Types of Faults

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Most of the seismic and volcanic activity on Earth is therefore concentrated along plate boundaries where mid-ocean ridges, trenches with island arcs, and mountain ranges are generated. Some seismic and volcanic activity also occurs within plates, as shown in **Figure 22**.



Figure 22 Distribution of Earthquakes along the Plate Boundaries

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Interesting examples of this interplate activity are linear volcanic chains in ocean basins such as the Hawaiian Islands and their westward continuation as a string of reefs and submerged sea mounts. An active volcano usually exists at one end of an island chain of this type with progressively older extinct volcanoes occurring along the rest of the chain.

Such topographic features have been explained by J. Tuzo Wilson [81](#) of Canada and W. Jason Morgan [82](#) of the United States as the product of "hot spots," magma generating centers of controversial origin located deep in the mantle far below the lithosphere. [83](#) A volcano builds at the surface of a plate positioned above a hot spot. As the plate moves, the volcano dies, is eroded, and eventually sinks below the surface of the sea, and a new volcano forms above the hot spot. Hot spot volcanism is not restricted to the ocean basins; other manifestations occur within continents, as in the case of Yellowstone National Park in western North America.

Plate Tectonics and Mountain Building.

The "accepted" methodology for raising mountain ranges is subduction and continental collisions raise mountain ranges. The implications of plate tectonics for the processes of mountain building have attracted much attention. One of the earliest to apply the new theory was Cambridge geologist John Dewey, [84](#) who analyzed the Appalachian and Alpine orogenies. Many other researchers have subsequently undertaken similar work in the Mediterranean system and the American Cordilleran ranges, as well as in the Appalachians. [85](#)

Toward a Unifying Theory

Working independently but along very similar lines, Dan P. McKenzie and Robert L. Parker [86](#) of Britain and W. Jason Morgan [87](#) of the United States resolved these issues. McKenzie and Parker showed with a geometric analysis that if the moving slabs of crust were thick enough to be regarded as rigid and thus to remain undeformed, their motions on a sphere would lead precisely to those divergent, convergent, and transform boundaries that are indeed observed. Morgan demonstrated that the directions and rates of movement had been faithfully recorded by magnetic anomaly patterns and transform faults. He also proposed that the plates extended approximately 60 miles to the base of a rigid lithosphere which had long been known to be underlain by a weaker asthenosphere marked by strong attenuation of earthquake waves. In 1968 the French geophysicist Xavier Le Pichon refined these propositions with a computer analysis of all plate data and proved that they did indeed form an integrated system where the sum of all crust generated at mid-ocean ridges is balanced by the cumulative amount destroyed in all subduction zones, **Figure 20. [88](#)** That same year the American geophysicists Bryan Isacks, [89](#) Jack Oliver, [90](#) and Lynn R. Sykes [91](#) showed that the theory, which they called the "new global tectonics," was capable of accounting for the larger part of the earth's seismic activity. Almost immediately others began to consider seriously the ability of the theory to explain mountain building and sea-level changes. Only a few years later, details of the processes of plate movement and of boundaries interactions along with much of the plate history of the Cenozoic era (the past 66.4 million years) had been worked out. Yet, the driving forces -- notwithstanding a brief flurry of discussion around 1970 -- remained mysterious and continue as such. The vast accumulation of data bearing on plate history and plate processes has yielded surprisingly little information about what happens beneath them. Pull by the subducting slab, push at the spreading ridge, convection in the asthenosphere, and even tidal forces have been considered, but in every case the evidence has been admitted as inconclusive. Many favor convection, but if this indeed is the driving force the flow pattern at depth is clearly not reflected in the surface

movements of the plates, constrained as they are by each other.

Evidence Supporting the Hypothesis

The plate movement analyses also indicate that the continents were joined together in the Paleozoic era, and supporting evidence is continuing to accumulate. The opposing Atlantic shores match well, especially at the 3,300-foot depth contour, which is a better approximation of the edge of the continental block than the present shoreline, as Sir Edward Bullard demonstrated in 1964 with the aid of computer analysis, **Figure 23**.

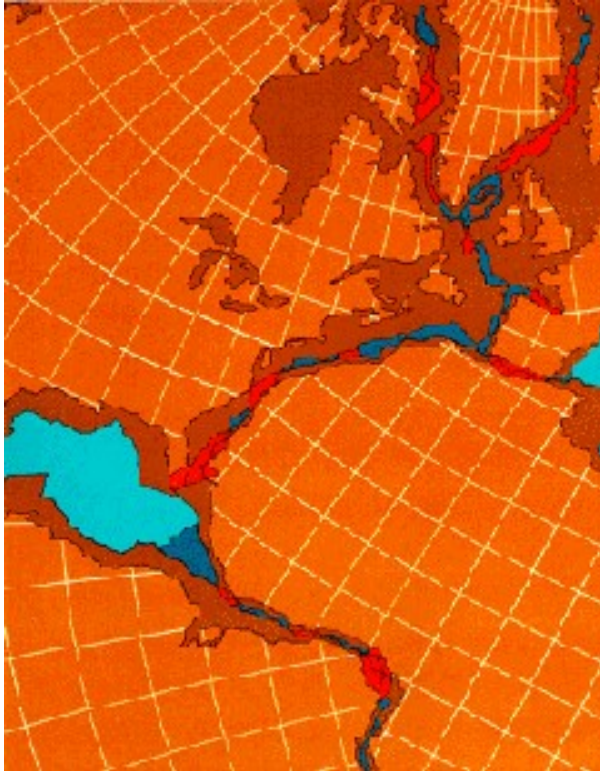


Figure 23 Computer Matched Coastlines

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Similarly, the structures and stratigraphic sequences of Paleozoic mountain ranges in eastern North America and northwestern Europe can be matched in detail. This fact was already known to Wegener and has been strengthened substantially in subsequent years. Often cited as evidence have been the strikingly similar Paleozoic sequences on all southern continents and also in India. This Gondwana sequences, so called after one of Suess's large continents, consists of glacial tillites, followed by sandstones and finally coal measures. Placed on a reconstruction of Gondwana, the tillites mark two ice ages that occurred during the long march of this continent across the South Pole, from its initial position north of Libya about 500 million years ago until its final departure from southern Australia 250 million years later, **Figure 24**.



Figure 24 Gondwana Glacial Areas

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The first of these ice ages left its glacial deposits in the southern Sahara during the Silurian period which extended from about 438 to 408 million years ago, and the second ice age did the same in southern South America, South Africa, India, and Australia from 380 to 250 million years ago. At each location the tillites were subsequently covered by desert sands of the subtropics, and these in turn by coal measures, indicating that the region had arrived near the equator.

During the 1950s and 1960s, patient work in isotopic dating showed that the massifs of Precambrian time found on opposite sides of the South Atlantic did indeed closely correspond in age and composition, and they probably originated as a single continent, Pangaea. [92](#)

Plate Tectonics and Life.

Inevitably the continuous rearrangements over time of the size and shape of ocean basins and continents followed by changes in ocean circulation and climate, have had a major impact on the development of life on earth. Active interest in these aspects of the earth science revolution has lagged behind that in other areas, even though as early as 1970 the American geologists James W. Valentine [93](#) and Eldridge M. Moores [94](#) attempted to show that the diversity of life increased as continents fragmented and dispersed and diminished when they were joined together.

The study of plate activity as a force in the evolution of life is based on the land bridges and continent collisions. [95](#) Toward the end of the Paleozoic, during the Permian period about 286 to 245 million years ago, there was a drastic drop in the variety of animal forms inhabiting the shallow seas around Pangaea. [96](#) Well over half of the total number of known families became extinct. This drop is attributed to the decrease in biogeographic variety that marks a world consisting of a single continent rather than one comprising many widely dispersed land masses. Other factors, such as a sharp decrease

in the area of shallow-water habitats or a change in ocean fertility due to upwelling, have also been invoked. Moreover, the extinction had a complex history. The latitudes were affected first as a result of the ending of the Permian ice age when the South Pole slipped beyond the southern edge of Pangaea. The equatorial and subtropical zones appear to have been affected somewhat later by global cooling; the extinctions were not felt so strongly on the continent itself. Instead the vast semiarid and arid lands that emerged on so large a continent, the shortening of its moist coasts, and the many mountain ranges remaining from the collisions that led to the formation of the super continent provided strong incentives for evolutionary adaption to dry or high-altitude environments.

The impact of plate movements and interactions on life is perhaps most clearly demonstrated by what happens when continents diverge or collide. During the middle Mesozoic period, when the Atlantic Ocean began to open, the similarity between the faunas of opposite shores gradually decreased in almost linear fashion -- the greater the distance, the smaller the number of families in common. The difference increased more rapidly in the South Atlantic than in the North Atlantic, where a land connection between Europe and North America persisted until well after the middle Cenozoic. The inverse, the effect of a collision between two hitherto separate land masses, is illustrated by the consequences of the Pliocene emergence of the Isthmus of Panama. In South America a highly specialized fauna had evolved, rich in marsupials but with few predators. After the emergence of the isthmus had made it possible for land animals to cross, numerous herbivores migrated from north to south. They adapted well to the new environment and were more successful than the local fauna in competing for food. The invasion of highly adaptable carnivores from the north contributed to the extinction of no fewer than four orders of South American land mammals. Only a few species, notably the armadillo and the opossum, managed to migrate in the opposite direction. Ironically, many of the invading northerners, such as the llama and tapir, subsequently became extinct in their country of origin and found their last refuge in the south.

DISSENTING OPINIONS AND UNANSWERED QUESTIONS

The Dissenters.

Scientific revolutions as far-reaching in their consequences as the plate tectonics revolution cannot be expected to be accepted easily. Nevertheless, once the theory had fully emerged acceptance was quick and widespread, and by the late 1960s its influence in the West was pervasive. Such was not the case in the Soviet Union, a country located largely in the continental interior far from present-day plate boundaries. As a central issue to global tectonics, Soviet scientists viewed the vertical movements of continental interiors, phenomena not satisfactorily considered by the plate tectonics theory. A leading spokesman for the Soviet position, the academician Vladimir Vladimirovich Belousov, strongly defended a model of the earth that postulated stationary continents affected almost exclusively by vertical motions. The model, however, only vaguely defined the forces supposedly responsible for the motions. In recent years, a younger generation of Soviet geologists has very gradually come to regard plate tectonics as an attractive theory and a viable alternative to the concepts of Belousov and his followers.

Opposition to plate tectonics was by no means limited to the Soviet Union. Critics were heard elsewhere as well. Sir Harold Jeffreys [97](#) continued his lifelong rejection of continental drift on grounds that his estimates of the properties of the mantle indicated the impossibility of plate movements. He did not take note of the mounting geophysical and geologic arguments that were in favor of a mobile outer shell of the earth. Others proffered different explanations of the accumulated evidence, like the suggestion that new crust was formed at trenches and destroyed on mid-ocean ridges.

The American geologists A. A. Meyerhoff and Howard A. Meyerhoff, [98](#) attempted to assemble data that contradicted the theory and thereby show that the supporting evidence was wrong, insufficient, or simply misconstrued. Demonstrating a remarkable command of often quite obscure literature, they issued a series of negative commentaries in the early 1970s, but they failed to convince the majority of their colleagues, partly because they did not offer alternative explanations for the evidence.

The only serious alternative had been proposed in 1958 by the Australian geologist S. Warren Carey [99](#) in the form of a new version of an old idea of the expanding earth model. [100](#) Carey accepted the existence and early Mesozoic breakup of Pangaea and the subsequent dispersal of its fragments and formation of new ocean basins, but he attributed

it all to the expansion of the earth, the planet presumably having had a much smaller diameter in the late Paleozoic. In his view, the continents represented the pre-expansion crust, and the enlarged surface was to be accommodated entirely within the oceans. This model accounted for a spreading ocean floor and for the young age of the oceanic crust; however, it failed to deal adequately with the evidence for subduction and compression. Carey's model also did not explain why the process should not have started until some four billion years after the earth was formed, and it lacked a reasonable mechanism for so large an expansion. Finally, it disregarded the evidence for continental drift before the existence of Pangaea.

Unanswered Questions.

As the philosopher Thomas J. Kuhn [101](#) has pointed out, science does not always advance in the gradual and stately fashion commonly attributed to it. Major breakthroughs often come from a leap forward that is at least in part intuitive and may fly in the face of conventional wisdom and widely accepted evidence while strict requirements for verification and proof are temporarily relaxed. Revolutions thus often become widely accepted before the verdict from rigorous analysis of evidence is complete. Such was certainly the case with the geologic revolution which also confirms Kuhn's view that a new paradigm is unlikely to supersede an existing one until there is little choice but to acknowledge that the conventional theory has failed. Thus, while Wegener did not manage to persuade the world, his theory was readily embraced 40 years later, even though it remained open to much of the same criticism that had caused the downfall of continental drift.

In 1974, almost alone among the doubters who tried to discredit the new theory with contrary evidence, the American geologist John C. Maxwell, in a closely reasoned paper enumerated all the points on which he believed plate tectonics had failed to offer an

explanation. Many of these points have since been resolved, but more than a few remain to suggest that the theory, though in essence valid, may be incomplete.

The greatest successes of plate tectonics have been achieved in the ocean basins where additional decades of effort have confirmed its postulates and enabled investigators to construct a credible history of past plate movements.

Inevitably in less rigorous form the reconstruction of early, Mesozoic and Paleozoic continental configurations have provided a powerful tool with which to resolve many important questions. On the other hand, the new paradigm has proved less useful in deciphering mountain-building processes or in offering explanations for the complex history of sea-level fluctuations. The American geologist L.L. Sloss [102](#) has devoted a great deal of effort to demonstrating that continents do indeed rise and fall in unison, but the possible mechanisms for such a process remain elusive.

Where plate boundaries adjoin continents, matters often become very complex and have demanded an ever denser thicket of ad hoc modifications and amendments to the theory and practice of plate tectonics in the form of microplates, obscure plate boundaries, and exotic terrains. A good example is the Mediterranean where the collisions between Africa and a swarm of microcontinents have produced a tectonic nightmare that is far from resolved. More disturbingly, some of the present plate boundaries especially in the eastern Mediterranean appear to be so diffuse and so anomalous that they cannot be compared to the three types of plate boundaries of the basic theory.

There is further evidence held by the American geophysicist Thomas H. Jordan [103](#) that the base of the plates extends far deeper into the asthenosphere below the continents than below the oceans. How much of an impediment this might be for the free movement of plates and how it might affect their boundary interactions remain open questions. Others have postulated that the lower layer of the lithosphere peels off and sinks late in any collision sequence producing high heat flow, volcanism, and an upper lithospheric zone vulnerable to contraction by thrusting.

It is understandable that any simple global tectonic model would work better in new oceans, which being young retain a record of only a brief and relatively uneventful history. On the continent, almost four billion years of growth and deformation, erosion, sedimentation, and igneous intrusion have produced a complex imprint that, with its intricate zones of varying strength must directly affect the application of plate forces. Seismic reflection studies of the deep structure of the continents have demonstrated just how complex the events that form the continents and their margins may have been, and their findings sometimes are difficult to reconcile with the accretionary structures one would expect to see as a result of subduction and collision. Notwithstanding these cautions and the continuing lack of an agreed-upon driving mechanism for the plates, one cannot help but conclude that the plate tectonics revolution has been fruitful and has immensely advanced scientific understanding of the earth. Like all paradigms in science, it will probably be replaced by a better one; yet there can be little doubt that whatever the new theory may state, continental drift will be part of it.

Conclusions on Plate Tectonic Theory

General Conclusions

The Plate Tectonic theory does describe the observed occurrences in the movement of the continents, but the theory is in need of constant revision to account for the many variances. These variances require the addition of microplates to the base theory and the trend is more toward the Continental Drift theory than a clean separation. The Plate Tectonic theory does not develop or explain an original plate or continent position. The adherents to the Plate theory have generally accepted the idea of Pangaea and Laurasia - Gondwana without proposing any additional detailed information. The acceptance without question of the age of the earth in terms of billions of years is a basic presupposition of the theory.

The presupposition that the center of movement of the continents from the Pangaea was the southern tip of Africa is neither questioned nor supported by the Plate Theory. The assumption is based on the evidence of similar glacial deposits in the south pole and adjacent continents, see **Figure 19**. However, similar data in Europe and North America are not considered. If it were taken into account and given the same weight as the other information the center of Movement conclusion would not have been acceptable as a plausible explanation.

Advantages

- 1) The theory does adequately describe the events at the plate boundaries as observed in modern time, particularly localized movements and events.
- 2) It provides an acceptable explanation of the occurrences of volcanos and earthquakes.
- 3) The modern scientific investigations in the area of tectonics are valid and descriptive of current activities.
- 4) The theory provides a basis for analyses of current events and the projection of future events along plate boundaries.

Disadvantages

- 1) It does not provide an acceptable explanation of the start of the continental movement or the initial plate boundaries.
 - 2) The theory assumes the age of the earth to be billions of years.
 - 3) The time frame for the continent movements is dependent on the definitions of the various periods in the history of the earth. The definitions of these time periods are based on fossil evidence and strata definitions which are a circular definition.
 - 4) The promoters of the Plate theory do not utilize all the available data.
 - 5) The explanation of mountain building by the initial formation of Pangaea is not feasible nor does it reflect or explain current observations.
- The explanation of the connection of North and South America is highly improbable.

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IN THE DAYS OF PELEG

by James P. Dawson

CHAPTER FOUR

A NEW PANGAEA, GOTTSLAND

The literature and the proponents of the Plate Tectonic and Continental Drift theories have said that Alfred Wegener was the father of the Continental Drift Theory [273](#) because he was the first to produce a unified theory. The literature also recognizes that there were earlier suggestions of the idea of Continental drift. About 1800 Alexander von Humboldt, a German naturalist, suggested that continents of South America and Africa were once joined. Fifty years later Antonio Snider-Pellegrini, a French scientist, suggested the same connection based on fossil findings. In 1596 Abraham Ortelius also is credited with suggesting that there was at one time a single super continent. [274](#) The proponents of both the Continental Drift and Plate Tectonic theories have ignored the first mention in the literature of a single continent. The earliest documented statement of a single super continent was made by Moses in the book of Genesis. [275](#) This information is missing from all the scientific literature. Genesis [276](#) also indicates "in the days of Peleg the earth was divided." The division of the single super continent Gottsland, would provide the basis for Laurasia and Gondwana and the start of the Continental Drift.

Geologic Coastline Comparison

Some mention of using soil type comparisons in matching coast lines as well as physical geometric correlations is contained in the literature. [277](#) However, no systematic world wide effort has been reported in the literature that uses soils to match and/or correlate coastline associations. NASA accumulated massive amounts of soil and rock data for comparison with the returned lunar samples in an effort to determine the origin of the moon. Several theories suggested that the moon was initially a part of the earth and the comparison of lunar and earth soil and rock samples would clarify the moon's origin, and possibly the earth's origin. The experimental evidence and geologic comparison of the lunar samples show the lunar material had the same composition as earth samples and are of the same general age. The differences were due to lunar samples being exposed to very high vacuum and ultra violet radiation with an absence of atmospheric moisture. The different mission samples from various lunar landing sites indicate that the moon was probably formed at the same time and from the same material as the earth, but did not provide any additional definitive information on the origin of the earth. However, the effort did provide enormous amounts of information and definition of soils are on a world wide basis. The United Nations has also accumulated soil and geologic data from around the world and much of this data has been reported in the references given in footnote 108. Geologic and soil data have been collected for most areas in the world by many groups for various reasons. [278](#)

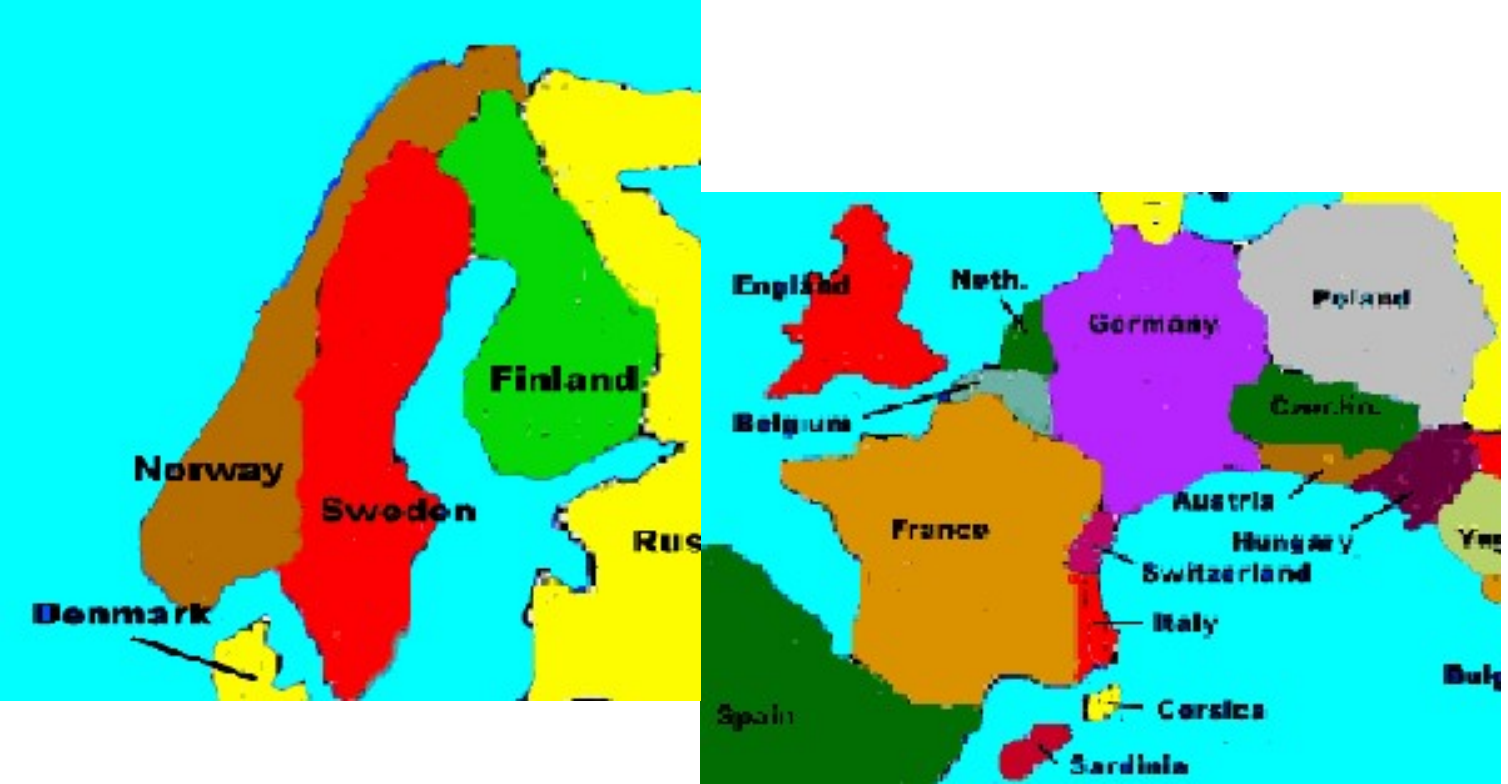


Figure 25 Proposed Mediterranean Coast

Many scientists have recognized geometric similarity between South America and Africa and have used this as a base for joining the continents. Based on a geometric match alone, one could place Italy along the southern coast of France as shown in **Figure25**

Figure 26A Scandinavian Countries Open

and match the Swedish coast to the Finish coast as shown in **Figure26A** and **Figure 26B**.

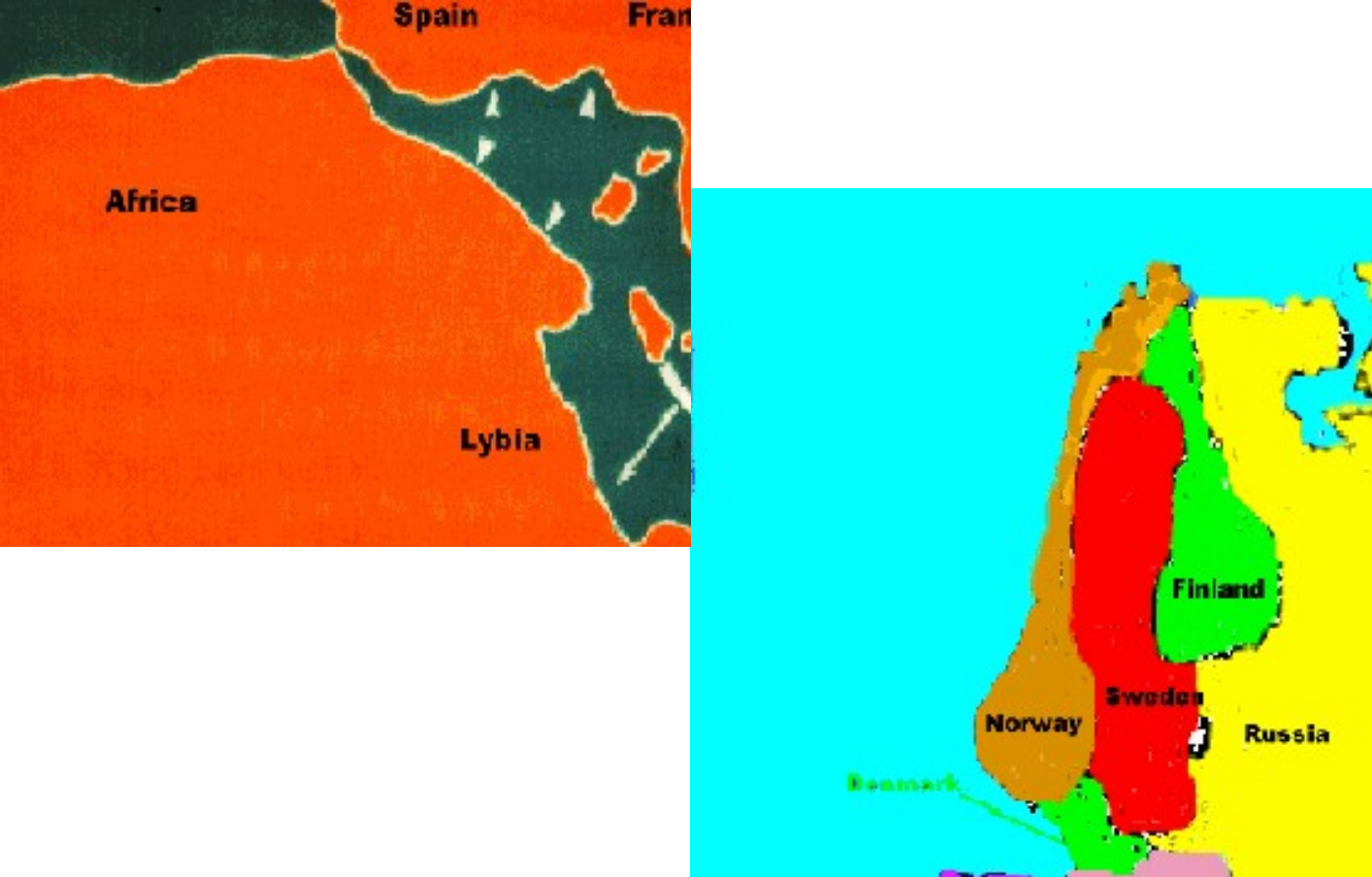
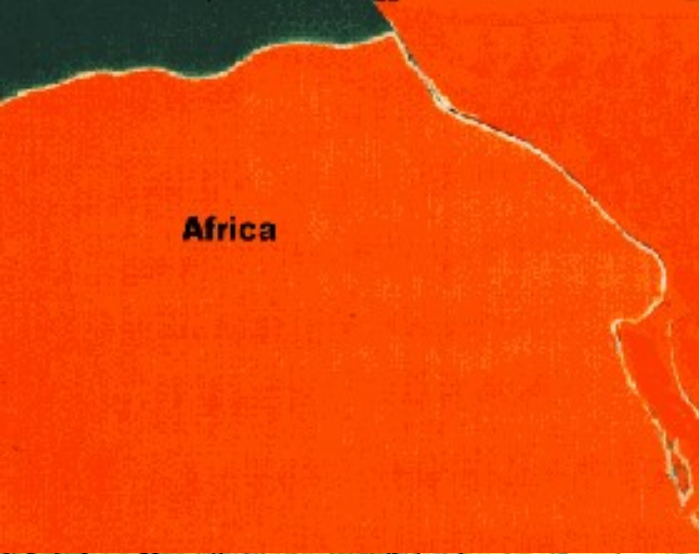


Figure 26B Scandinavian Countries Closed

The general soil types on the Swedish and Finnish coasts do correspond, but the general soil types on the western coast of Italy are not comparable to the southern coast of France. The soils of the southern coast of France are very similar to the Northern African coast. The soil types of the western coast of Italy are very similar to the soils along the gulf coast of Libya, and the east coast soils and geometries of Italy correspond to the old Yugoslavian coast. If one matches the soil type to soil type, coast to coast along the Mediterranean Sea one could collapse the Mediterranean Sea as shown in **Figure 27A** and **Figure 27B**.

Figure 27A Open Mediterranean Sea



**Figure 27B Closed
Mediterranean Sea**

These are not complete matches, data for complete coverage of the coast lines is not available but sufficient data is available to enable one to make these connections. The Black Sea, the Caspian Sea, the Persian Gulf and the Red Sea, see **Figure 28** may also be collapsed by matching soils and coasts.

Figure 28 Seas Formed by Continental Drift



Figure 29 Australian Costal Matches

Australia also exhibits some unique soil and coast line correlations. The eastern and southeastern coasts of Australia match the western coastlines of India as shown in **Figure 29**, but the northern coastline corresponds to the eastern coast of Africa. The soils and coastlines of Australia do not correspond to the southern tip of Africa or the eastern coast of India as indicated by the suggested arrangements of Pangaea or Gondwana as shown in **Figures 4 and Figure 5, Chapter 2.**



Figure 4 Pangaea



Figure 5 Laurasia/Gondwana

This continental fit would show that India was not associated with the southern tip of Africa and did not travel north and collide with Asia. Matching the soils and coastlines of South America to Africa poses some additional problems.

Figure 30 Continent and Soils Match - South America/Africa

The soils at point A, **Figure 30** do correspond to the northwestern coast of Africa, but it is not a unique match. These soil types are also found along the northern coasts of Spain. In a similar manner the South American soils at point B are very general soil types and correspond to several locations. However, the soils at C, D, E, F and G do correspond to the African coast soil types and the geometry of the coastlines provides a good physical match. If these soil and coastlines are connected and the corresponding water areas collapsed, one would obtain a single super continent similar to Gottsland shown in **Figure 31**.



Figure 31 The New Pangaea - Gottsland

The general soil types and coastlines of North America are similar to those of western European coastlines, but they are not as definitive as the South America-African connections. The Indonesian Islands do have a general soil match to the eastern side of India and Burma. Antarctica and the Philippine Islands are placed in the areas shown, but they did not base this on soils or physical coastlines.

Conclusions for Gottsland

This continental arrangement for the super continent Gottsland is in sharp contrast to that proposed for Pangaea in the Continental Drift and Plate Tectonic Theories. In the Continental Drift Theory no explanation was given for the arrangement of the continents to develop Pangaea. The continental arrangement was proposed by Wegener [279](#) and accepted by the scientific community and none of the many papers on Continental Drift questioned the physical design of Pangaea. Laurasia and Gondwana were derived from Pangaea and also were generally accepted by the scientific community without harsh debate. The Bible [280](#) indicates the single super continent did exist. The physical and geological evidence points to the fact that a single super continent did exist in the past and strongly suggests the arrangement of the continents was closer to the Gottsland association than the original proposed Pangaea.

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275 Genesis 1:9. And God said, Let the waters under the heaven be gathered together unto one place, and

let the dry land appear: and it was so. [KJV] [Return](#)

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IN THE DAYS OF PELEG

by James P. Dawson

CHAPTER FIVE

THE CENTER OF GOTTSLAND

The Continental Center

The movement of the continents has been shown to be a highly ordered movement, but the question of where the initial center of the movement was located has not been answered. The Continental Drift Theory suggests that the center of the movement is from the southern tip of Africa. The literature seems to indicate that this was acceptable because many scientists believe that this is where *Homo sapiens* first appeared. [112](#) The Continental Drift theory indicates that the super continent, Pangaea, started breaking apart and at first formed two continents, Laurasia and Gondwana, but the theory also states that the continents moved from an initial center point at the tip of Africa. This is not necessarily an apparent contradiction in that the movement of Laurasia could have been to the north and all the other movements could have occurred in a northerly direction but at a slower rate. If the arrangement of the continents was as suggested in Chapter 4, then the southern tip of Africa could not be the central point of movement for the continents.

Ezekiel [113](#) indicated that in the end times the people of Israel will be returned to the promised land and they will dwell in the center of the earth. Did God mean the literal center of the earth or was this just a figure of speech? This phrase has also been interpreted as "midst," "among," and "navel." The Arabs refer to AL Jafr as the "valley of the source," which would be a good description of a "navel." A Rabbi friend of mine indicated that the Hebrew word meant much more than just the physical center. It had a very special spiritual meaning also. It meant the source of life (the navel), but also the source of the spirit, God's place. The word was taken to mean the source of spiritual life and all sustaining power. **ZION** If taken literally, what land did God promise to Abraham and Jacob that He would consider the center of the earth?

Promised Land Boundaries

To provide a Scriptural basis for Israel's restoration to the land, one needs to review the covenant that God made with Abraham. **Genesis 12:1-3** states:

Now the Lord had said unto Abram, Get thee out of thy country, and from thy kindred, and from thy father's house, unto a land that I will show thee: And I will make of thee a great nation, and I will bless thee, and make thy name great; and

thou shalt be a blessing: And I will bless them that bless thee, and curse him that curseth thee: and in thee shall all families of the earth be blessed. (KJV)

God told Abraham to leave his native country and people and to go to a land that He would show him. Abraham was told that if he would do this, God would make a covenant with him. That covenant contained a series of promises; among them was the statement that the land would belong to his descendants forever, but its possession required obedience. The extent of the land was detailed in **Genesis 15:18-21:**

In the same day the Lord made a covenant with Abram, saying, Unto thy seed have I given this land, from the river of Egypt unto the great river, the river Euphrates: The Kenites, and the Kenizzites, the Kadmonites, and the Hittites, and the Perizzites, and the Rephaim, and the Amorites, and the Canaanites, and the Girgashites, and Jebusites. (KJV)

The northern border of the land is given in **Ezekiel 47:17:**

And the boundary shall extend from the sea to Hazar-enan at the border of Damascus, and on the north toward the north is the border of Hamath. This is the north side. (KJV).

The eastern border is given by **Ezekiel 47:18:**

And the east side, from between Hauran, Damascus, Gilead, and the land of Israel, shall be the Jordan; from the north border to the eastern sea you shall measure. This is the east side. (KJV)

The western side is given by **Ezekiel 47:20:**

And the west side shall be the great sea, from the south border to a point opposite Lebo-hamath. This is the west side. (KJV)

The southern border is specified in **Ezekiel 47:19:**

And the south side toward the south shall extend from Tamar as far as the waters of Meribath-kadesh, to the brook of Egypt, and to the Great sea. This is the south side toward the south. (KJV).

Figure 32 shows the land that God promised Abraham. The boundaries are from the River Euphrates (at the top of the figure), to the Hills of Lebanon, to the great sea (the Mediterranean), to the great Egyptian river. The literature contains several articles on the location of the "**brook of Egypt**" or the "**great Egyptian river**," however they suggest different locations and reflect the different translations.



Figure 32 Land Of Promise

And the south side, it shall run from Tamar as far as the waters of Meribath-Kadesh, thence along the brook of Egypt to the Great sea. This shall be the South side. **Ezekiel 47:19 RSV.**

And the south side southward, from Tamar even to the waters of strife in Kadesh, the river to the great sea. And this is the south side southward. **Ezekiel 47:19 KJV**

On the south side it will run from Tamar as far as the waters of Meribah Kadesh, then along the Wadi of Egypt to the Great Sea. This will be the south boundary. **Ezekiel 47:19 NIV.**

The locations vary from the Nile to the "wadi of Egypt" in the northern Sinai and there appears to be no compelling reason to accept one theory over the other. **Exodus 23:31** does state:

And I will set your bounds from the **Red Sea to the Sea of the Philistines.** **Exodus 23:31 RSV**

which would give credence to the location of the "**brook of Egypt**" being what is now considered the Suez Canal. Also, the Cuneiform tablets, [114](#) especially those found at Elba state that Assyrian kings went across the desert and fought a battle at the great Egyptian river. Then they proceeded westward to fight another battle at the Nile. This implies that the great Egyptian river is between the Sinai and the Nile. **Exodus 23:30-31** states:

I will drive them out before you little by little, until you become fruitful and take possession of the land. And I will fix your boundary from the Red Sea to the sea of the Philistines, and from the wilderness to the River Euphrates; . . .

From these Scripture references one can determine that the land given to Abraham and his descendants is represented by **Figure 32**, and it contains all of the land of the Arabian peninsula. The land in **Figure 32** does belong to the descendants of Abraham, but what portion of the land belongs to the Israelites? Inside the dotted lines is the land area that many scholars assign as the Jewish land of promise. The land to the east belongs to Abraham's other descendants. We are told in Genesis that Ishmael [115](#) and Esau [116](#) and their descendants settled in lands to the east of present day Israel. Earlier Lot, after he and Abraham decided there wasn't enough land for their flocks, had journeyed eastward to the Jordan River valley. So all the land to the east of the dotted line on the map is now occupied by the Arabic descendants of Abraham, but the land inside the dotted line was without question promised to Jacob and his offspring. The Bible says that "He gave them the land of the Canaanites." [117](#) The Scripture does not indicate that the Sinai were given to any ethnic group as an inheritance or occupied by any other ethnic group, and Christopher Sykes and Daniel C. Snell suggest that portions of the Sinai were part of the land originally held by the Canaanites. [118](#) Scripture does include it in the land of the Abrahamic covenant and it hasn't been given away as an inheritance; therefore it belongs to the twelve tribes of Israel and their descendants.

Some scholars assign all the land described above as belonging to Israel because **Deuteronomy 1:8** states:

Behold, I have set the land before you: go in and possess the land the Lord swore unto your fathers, Abraham, Isaac, and Jacob, to give unto them and to their seed after them.

We read that God's instructions to Moses were to lead His people to the land promised to Abraham, Isaac and Jacob. Some take this to mean that Israel gets the entire covenant land described to Abraham. But **Deuteronomy 2:4-5, 9** states:

And command thou the people, saying, Ye are to pass through the coast of your brethren the children of Esau, which dwell in Seir; and they shall be afraid of you: take ye good heed unto yourselves therefore: Meddle not with them; for I will not give you of their land, no, not so much as a foot breadth; because I have given mount Seir unto Esau for a possession. . . . And the Lord said unto me, Distress not the Moabites, neither contend with them in battle: for I will not give thee of their land for a possession; because I have given Ar unto the children of Lot for a possession. **Deuteronomy 2:4-5,9**

They were to take this land, but they wouldn't get a single foot of the land that God had given to someone else as an inheritance, according to Deuteronomy 2. None of the land given to Lot, Ishmael, Esau and their descendants belongs to the Israelites. The Israelites

might trade with them, but they wouldn't possess any of their land (everything east of the solid line in **Figure 32**). **Ezekiel 47:18** specifies that the Jordan river is the east side of the Israeli land.

And the east side ye shall measure from Jauran, and from Damascus, and from Gilead, and from the land of Israel by Jordan, from the border unto the east sea.
Ezekiel 47:18

Figure 33 is a close-up of the land area shown by the dotted lines in the preceding figure which is the land that will be Israel's possession. The borders are consistent with the Scripture except for the northern Israeli border.



Figure 33 Land Promised to Israelites

The figure shows the northern border of the shaded area as the northern border of present day Israel; but this is not the northern Biblical border of Israel. Ezekiel gave us the northern border of the promised land as a line from a bend in the river Euphrates through a point on the Damascus - Hamath border north of Damascus and from there to the Mediterranean Sea. [119](#) This line is shown in red in **Figure 34**. We know the point where the line intersects the Mediterranean coast from Obadiah 20 which states:

And the captivity of this host of the children of Israel shall possess that of the Canaanites, even unto Zarephath; and the captivity of Jerusalem, which is in Sepharad, shall possess the cities of the south.



Figure 34 Northern Border of Land of Promise

This line is represented in **Figure 33** by the dotted line to the north of the shaded area and a map of the area is shown in **Figure 34**. Zarephath is shown on the coast and is the terminus of the northern Israeli border on the Mediterranean coast.

In conclusion, what has traditionally been old Palestine and the Sinai Peninsula (i.e., everything inside the dotted line and the Sinai peninsula, **Figure 33**) is the land promised to the Jews and is the center spoken of by Ezekiel.

Return to Zion

In the beginning God made Adam in His own image and placed him in the garden of Eden. In the garden of Eden God walked with man, and it was a place that was sacred to the Lord. He placed Adam and Eve in the garden. [120](#) God had chosen this land for His people at the center of the earth. Later when He called Abraham, [121](#) He led him to His mountain, Mount Zion, [122](#) where he was to sacrifice Isaac. When Moses led the Hebrews out of Egypt, they were to go to the land that God had promised their forefathers, but Joshua was the one to take them across the Jordan River. David placed the Ark of the Covenant on Zion. [123](#) Jesus went to Zion to pay the price for our sins. [124](#) Jesus ascended from Zion [125](#) and He will return to Zion, [126](#) and His Saints will be with Him. When Adam was placed on Zion, he was the first man on Zion; when Eve was created, they became the first family on Zion. When Abraham and Lot arrived at Zion, they were the first clan on Zion. At the Exodus the Hebrews became the first nation to go to Zion, and when Christ returns with His saints, this will be the first universal kingdom to come to Zion. It appears that all through the Scriptures God has brought His people to

His mountain Zion, the center of the earth, Israel.

Restoration of Israel

The land area of the promised land of Israel is quite small and fragile as the land bridge between the continents of Europe, Asia and Africa. The Continental Drift theory indicates that the super continent Pangaea broke into and became Laurasia and Gondwana, but if one studies the maps of the suggested continents, none indicates that there was a connection between these continents. It seems highly unlikely that the continents would move in such a manner that this land bridge would be formed. If one accepts the super continent Gottsland as described in Chapter 4, the land bridge would be maintained because the movement of the continents would be away from this central point and it would remain essentially stationary. It has been chosen by God to be the home of His people and He will establish His government there when He has returned His people to the land. [127](#)

To compare these borders to present day Israeli borders one must consider the immediate past history of Palestine. [128](#) The Jews were allowed to purchase and possess a moderate portion of the land, which was possible through the Balfour Declaration, issued by the British in 1917, just after World War I. This declaration viewed with favor the establishment in Palestine of a national home for the Jewish people. The dark areas inside the borders of Palestine, **Figure 35**, are representative of the land areas which belonged to the Jews in 1925.



Figure 35 Jewish Land in 1925

Figure 36 shows the land as it looked in 1948. The dark areas have by this time increased in area, owing to the United Nations Partition Plan enacted in 1947.



Figure 36 Jewish Land in 1948

The Holocaust changed world opinion about the land for Palestine being a homeland for the Jews. The world had essentially ignored the Zionist movement and its cry for a homeland in Palestine, but after the Holocaust of World War II, the world countries were more sympathetic toward the idea and the plight of the Jews. The United Nations voted on 29 November 1947 on the partitioning of Palestine to give the Jews a homeland. The vote was 33 for partition, 12 against (which included the Muslim states) with 10 abstentions. The partition was to become effective on May 14, 1948. Oddly enough, after Israel declared her independence in May 1948, the United Nations voted to censure Israel for this act and the vote was 48 for censure and seven abstentions, which was almost a

complete reversal of the original vote for partition.



Figure 37 Jewish Land in 1956

In 1947 the Balfour Declaration, signed thirty years earlier, was enforced by the United Nations, and a Jewish state was established in Palestine. Because there were 200,000 Palestinians in the land at that time, the United Nations partitioned the land. The Palestinians occupied the yellow areas of the map, **Figure 37**, and the Jews the red areas. The United Nations plan was based on two lines of reasoning: One, that the Palestinians and the Jews each had a fair share of the good land for farming; Two, that the land was to be divided in such a manner that would make war an impossibility. The supposition was that there would never be a war because neither side could properly defend its land. They reasoned that neither side could supply their troops without a fight, and therefore a war was not feasible. Unfortunately, governmental wisdom fell short of the mark. Immediately after the U.N. Partition Plan went into effect, the Jews called their Council into session and promptly declared their independence. Within an hour, they were at war. The wisdom of men had lasted almost an hour. As a result of this first war, Israel drove the Palestinians out of the southern part of their land. Overall, however, the 1948 war had little effect in the land actually changing hands. Major caches of Palestinian arms and ammunition were in the lands held by them in the south. However, two Israeli terrorist

groups became the armed forces of Israel in those early days. These two groups called Haganah and the Paramach captured those stockpiles of Palestinians' arms, thus greatly reducing the Palestinian military threat. At that time, the leader of the Haganah was Menachem Begin, who later became Prime Minister of Israel.

Israel was attacked again in 1956 which resulted in Israeli land being expanded in the south and in the area around Haifa as shown in Figure 37. The Arabic nations attacked the Israelis again, but this time all of the Palestinians in the area of southern Israel fled into the Gaza Strip. The Palestinian refugees in this small area experienced a great deal of suffering and misery. The northern Palestinians just south of the Lebanese border fled to Lebanon. As they coalesced into an armed force, they became known as the Palestinian Liberation Organization, PLO.



Figure 38 Jewish Land after the 1967 War

Not until the Six-Day War of 1967, however, did the Jews decisively repossess the land. In this war, Israel captured the west bank of the Jordan, Jerusalem, the Golan Heights to the north and the Sinai Peninsula, **Figure 38**.



Figure 39 Northern Biblical Border of Israel

In 1973, Israel had to fight another war. During this Yom Kippur War, the Israelis did not capture any additional land from the Arab nations. After almost two thousand years and four major wars since 1948, the Jews have returned to the land of promise. Restitution of the land to the descendants of Jacob is being made to the Nation of Israel. Then in 1977 when Sadat of Egypt began the Peace Initiative, Israel returned the Sinai. The people who now occupy the Sinai are not part of Abraham's covenant, so the total area has not been completely restored. The Northern border is in the process of being restored at this writing. Ezekiel 47 states the northern boundary for Abraham's covenant shall be on a line from the sea to a point on the old Hamath - Damascus border - north of Damascus to the bend in the Euphrates River to the East. **Figure 34** shows a map of the area under discussion. The bend in the Euphrates is point **E**, and the point on the border of the old city empires of Hamath and Damascus is point **D** on the map. The exact spot is unknown; however, it is in this general area. The line extends to the sea through the town of Zarephath. The choice of this point is due to Obadiah 20 which states: **"And the captivity of this host of the children of Israel shall possess that of the Canaanites, even unto Zarephath . . . and the cities of the south."** Then the northern boundary of Israel will be a line very similar to that shown in **Figure 39**. The land in the North should be south of a line that runs from Zarephath to the large lake in the Bekka Valley. The Jordan River is to be the eastern boundary for Israel. When Israel took southern Lebanon in June of 1982, they conquered this territory and more -- even unto Beirut. Prime Minister Begin stated that they wanted a secured 25-mile buffer zone for Israel's northern

border. **Figure 39** shows this buffer zone. Exactly 25 miles north of the Israeli border on the Mediterranean is the town of Zarephath and exactly 25 miles north of Metula, the most northern Israeli town in the upper Galilee or Bekka Valley, is the lake discussed above. Prime Minister Begin's buffer zone would give Israel its northern biblical border.

Practically every large scale world event of the recent past has contributed to these results. For example, during or after World War I, what territory changed hands? Of all the countries in this global conflict, who took what? Did Germany change hands; did France? Before this period, Israel had been under the control of the Turkish government. But after World War I, the Turks left. Palestine, Israel, returned to the control of a Christian nation, England. God had used mankind's first world war to implement His Word as He restored Israel to His promises. The Second World War and the Holocaust led the countries of the world through the UN to give the Jews a homeland. The Lord God returned His people to the Land of Promise.

At the turn of the century the British Empire encompassed the globe. The **"sun never set on the British Empire."** It controlled one fourth of the world population and one fifth of the land mass of the earth. In 1917 the British government issued the Balfour Declaration suggesting a homeland for the Jews in Palestine. The British had received Palestine as a protectorate from the Turks after World War I. In the early thirties the British government developed a policy of maintaining the ratio of the Palestinian- Arab/Jewish population at a constant value and greatly restricted the immigration of Jews to Palestine. This action was taken to appease the oil rich Arab nations. World War II interrupted Britains' control over Palestine, but the ratio policy was reinstated by the British government when it regained control over Palestine after World War II. From the time that the British imposed restrictions on the Jewish immigration to Palestine the British Empire began to disintegrate until now it consists of just a few islands. **"I will bless those that bless them and curse those who curse them."** The Lord is keeping His promise to return the Jews to the center of the earth, Zion.

Spiritual Center

Israel is the spiritual center for the three monotheistic religions, Christianity, Judaism, and Islam. Each religion has holy places on Zion and because of this, Zion and Jerusalem have become a focal point for modern foreign policy among the major nations. What happens in Israel effects all the nations of the earth, according to the Premillennialist view; the events of the end times will be centered in Israel. [129](#) The Bible indicates that the events of the end times will be centered in Israel and when Christ returns, Israel will be the center of government and Christ will rule from there. [130](#)

Center of the Origin of Man

The scientific literature [131](#) has many suggestions as to where and how man originated. However, all are dependent on the theory of evolution. Liberman [132](#) and Jackson developed three models for the origin of man. All three models indicate that man originated in the southern tip of Africa. The Out-of-Africa Displacement Model presents the view that the molecular and biochemical data suggest a migration of modern *Homo*

sapiens out of Africa about 200,000 years ago replacing all preexisting populations in Europe, Asia and the offshore land masses. [133](#) A second major model, Multi Regional Continuity Evolution, holds that the fossil evidence suggests modern *Homo sapiens* evolved independently of early *Homo erectus* or *proto-erectus* forms in several different geographical regions emerging in a single widespread event sometime after *Homo erectus* migrated out of Africa. [134](#) The third model, the Afro-European-*sapiens* Hypotheses, also suggests that modern *Homo sapiens* first arose in Africa and migrated soon thereafter to Europe and later to Asia. [135](#) All three models state that the *Homo sapiens* ultimately replaced the indigenous groups, and they did so with some absorption of local genes into their gene pools. The history of the race concept illustrates that some small amounts of difficult data have been built into an enormous edifice of beliefs about the races and the presumed reality of biological divisions within the species *Homo sapiens*. The race concept enjoyed almost complete support among scientists in the United States up until the late 1930s. [136](#) The process of conceptional extinction began in the 1930s, and it has now become politically correct to ignore all aspects of race in anthropological studies. [137](#) There are four types of reasons for this rejection of race: empirical, definitional, availability of alternative concepts, and humanitarian; but in all the studies, no one suggested the actual origin of the races or of man.

The Bible indicates that all men were descendants from the sons of Noah and some suggest that the wives of the sons were of different races, but this idea is not supported by Scripture. The Scripture does inform us that after several generations all of the people were gathered in the land of Shinar. [138](#) They were of one language and they decided to raise a tower "**whose top may reach unto heaven.**" The Scriptures also relate that God was displeased and He confused their tongues and scattered them "abroad from thence upon the face of all the earth." The purpose of God's action was to make the people disperse as He had instructed Noah and his sons. The confusion of tongues had a divisive effect on the people. Race is also very divisive among men. One tends to associate with people that have the same attributes as he possesses. Since both science and the Bible indicate that man came from a single source how did the different races originate?

Since the people were in one area, Shinar, and God wanted them to disperse, it may be that He not only confused their tongues but also introduced the races. The skin color changes as one travels from the Mideast toward the east. Skin color is light tan in the Mideast, it becomes brown in India, and it is yellow further east. Also, facial features change. The eyes take on a new appearance. If one travels toward the south-southeast, the brown tone skin is found in Egypt, and the further south-southeast one goes the blacker the skin becomes. The facial feature that changes is the lips, and the hair takes on a distinct texture. As one travels toward the northwest, the brown skin is found in Turkey and Greece. Further northwest the skin becomes white, and the hair tends toward blonde coloring, and the facial feature that changes is the nose.

During these ancient times the clothing worn was similar to the robes worn by the women in Arabia and Iran today. Their bodies are fully covered and only their faces are left uncovered. If the distribution of races was made when the Lord scattered the people, then one could tell where the individual belonged by the color of his skin and the facial features. The American Indian is the exception, but the Scripture states that the land was

divided in **Genesis 10** and the people were not divided until **Genesis 11**, so there would be no need for the facial feature of the American Indian to change. Is this where the races originated? The divisiveness of skin color still exists today even though science has shown that there are essentially no biological differences in the races of man. The color of a man's skin is only a pigment in the outer layers of the skin and science has not been able to determine what that pigment is or its cause. [139](#) But the coloration of the skin of the inhabitants of the land of Shinar at the time following the tower of Babal may be related to a function of the distance from the center of the earth, the land of Shinar, the middle east.

The Alphabet Center

Many cultural items are also centered in Israel. For example, the languages to the east of Israel contain characters, like Chinese and Japanese characters; the alphabets to the west are oriented toward cursive letters, not characters. The Hebrew alphabet contains both cursive and character elements. East of Israel one reads from the back of the book to the front and from the right to the left, but west of Israel one reads from the front of the book to the back and from left to right.

The River from Eden

The location of the garden of Eden has been the subject of much debate. The scientific literature suggests that man originated near the southern tip of Africa. Several theories have been proposed, but all fall within three major models as discussed above. These models differ in the mechanism for dispersment of the homo-sapiens northward and the relationship between the homo-sapiens and the homo-erectus. The choice of southern Africa as the birthplace of homo-sapiens is based on the discovery of human type fossils. DNA testing of the fossils is indeterminate as to their human classification or origin. The generally accepted area for the origin of man is the "**fertile crescent**" of the Tigris-Euphrates river valley. The Scripture indicates that after Noah's flood, the ark came to rest in the mountains of Ararat, which are near the head waters of the Euphrates and Tigris rivers. It has been suggested that the natural movement of people would be down river to better soils and environment, such as would be available in the area between the Tigris and Euphrates river. This could have resulted in the idea of the fertile crescent being the birth place of mankind. The passage in **Ezekiel 28:13-14**, which states:

Thou has been in Eden the garden of God; every precious stone was thy covering, . . . Thou wast on the Holy Mountain of God; thou hast walked up and down in the midst of the stones of fire. Thou wast perfect in thy ways from the day that thou wast created, till iniquity was found in thee. By the multitude of thy merchandise they have filled the midst of thee. By the multitude of thy merchandise they have filled the midst of thee with violence, and thou hast sinned: therefore I will cast thee as profane out of the mountain of God. . . . [Ezek. 28:13-16.](#)

This passage in Ezekiel could be interpreted as indicating that the **Garden of Eden** was on **Mount Zion** and was the place of the origin of man and God has been returning His people to Zion since Adam and Eve, as discussed above.

Genesis 2:10-14 states:

And a river went out of Eden to water the garden; and from thence it was parted, and became into four heads. The name of the first is Pison: that is it which compasseth the whole land of Havilah, where there is gold; And the fold of that land is good: there is bdellium and the onyx stone. And the name of the second river is Gihon: the same is it that compasseth the whole land of Ethiopia. And the name of the third river is Hiddekel: that is it which goeth toward the east of Assyria. And the fourth river is the Euphrates.

If one accepts the interpretation of Ezekiel 28:13-14 as establishing that the Garden of Eden was on Mount Zion, and then the river came from Zion and became the head waters of four rivers. The name of the first river is Pison and it encompasses the whole land of Havilah. **Figure 40.**



Figure 40 The Nations of Genesis 10

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Genesis 10 indicates that the land of Havilah was on the Arabian peninsula and some maps give the name Havilah to the entire peninsula. The river Pison would then flow down the Jordan and down the Arabian gulf. The river Gihon flowed around the whole land of Ethiopia or Cush. The river Hiddekel is the river known today as the Tigris, and the fourth river was the river Euphrates. But if the land wasn't divided until Genesis 10; then, in Genesis 2 the land mass would be similar to Gottsland. If one collapses the

Mediterranean Sea and the adjacent gulfs, the head waters of the Tigris, the Euphrates, the Jordan and the Suez canal appear to originate in about the same area.. These rivers also isolated Israel and the Sinai near the center of the land mass, Gottsland.

The Flood of Genesis

One of the main arguments that some have used against the idea of a literal world flood is that there is insufficient water to cover the entire land masses of earth. However if there was a single super continent **Gottsland** at the time of the flood, the amount of water required for full coverage would be greatly reduced. One could have a sea swell such as occurs in a hurricane or in the tides and sufficient water would be available to cover the earth. The tidal effects of the gravitational pull of the moon and sun may have supplied the necessary increase on one side of the earth. Baumgardner [140](#) suggests that runaway subduction may have been the driving mechanism for Noah's flood. Many different theories have been advanced. Genesis states that the fountains beneath the earth were opened and the rains came and the whole earth was covered. When the fountains of the deep and the windows of heaven were closed, the waters started receding. Then where did the water go? During the studies on the soil types and coastal soils it was found that alluvial soils have been found in areas where they should not be. Alluvial soils are the kinds of soils that developed in parent material deposited by water. In many parts of the world they are found on the mountain tops, but they are normally found in the bottoms of lakes and rivers. Yet, deposits of alluvial soils are on the mountain tops. In Oklahoma the soils occur in the tops of the Quachita, Arbuckle, and Wichita mountains, some 3000 feet above today's river, lake bottoms, and flood plains. This is shown in **Figure 41**, which is the geologic province map of the State of Oklahoma. [141](#)



Figure 41 Oklahoma Alluvial Soils

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The different colored areas represent different rock or geologic provinces that occur in Oklahoma. Similar maps for the State of Colorado indicate that alluvial soil deposits are also found in the Rocky mountains at high elevations. Alluvial soil deposits are also found in the Black Hills of South Dakota, on top of Lookout Mountain along the Georgia-Tennessee border, and along the Georgia Atlantic shoreline. The soils in Georgia-Tennessee are unique to the area and are made of a combination of soil types that exist only west of the Mississippi indicating that the soils are not native to the area but were transported and deposited to this area. If one draws a line from the alluvial soils at the highest elevation to the lowest elevation, the line produces a possible drainage pattern from the Rockies Mountains to the Atlantic Ocean, **Figure 42.**

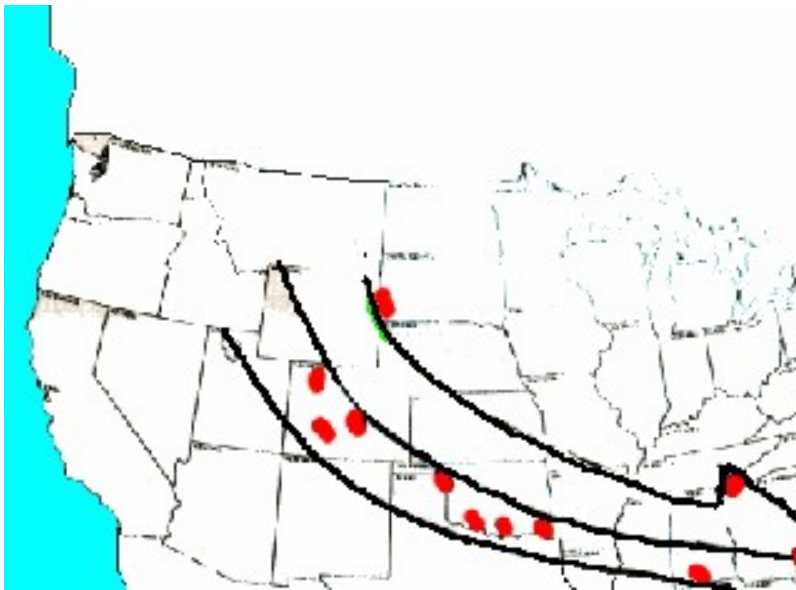


Figure 42 United States Alluvial Soils

Similar drainage patterns can be shown for the Asian and South American continents. [142](#) Since the flood occurred before the earth was divided in Genesis 10, one should overlay these drainage patterns on the map of Gottsland, as shown in **Figure 43.**

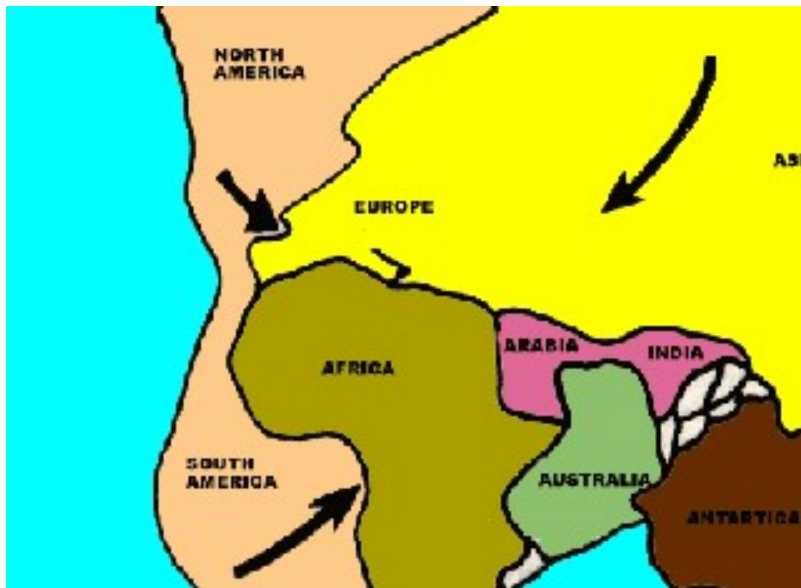


Figure 43 Flood Drainage Point

The patterns imply that the drainage was toward the Mideast, or possibly even Israel. Is this the center where the water returned under the surface from the flood? [143](#) This is another possible example for the center of the earth being in or near Israel. NASA satellite data also indicates that there is a vortex type area at Al Jafr, Jordan, just east of the Dead Sea. This is shown in **Figure 44**, a reproduction of multi-spectral satellite data obtained by NASA on 28 July, 1975.

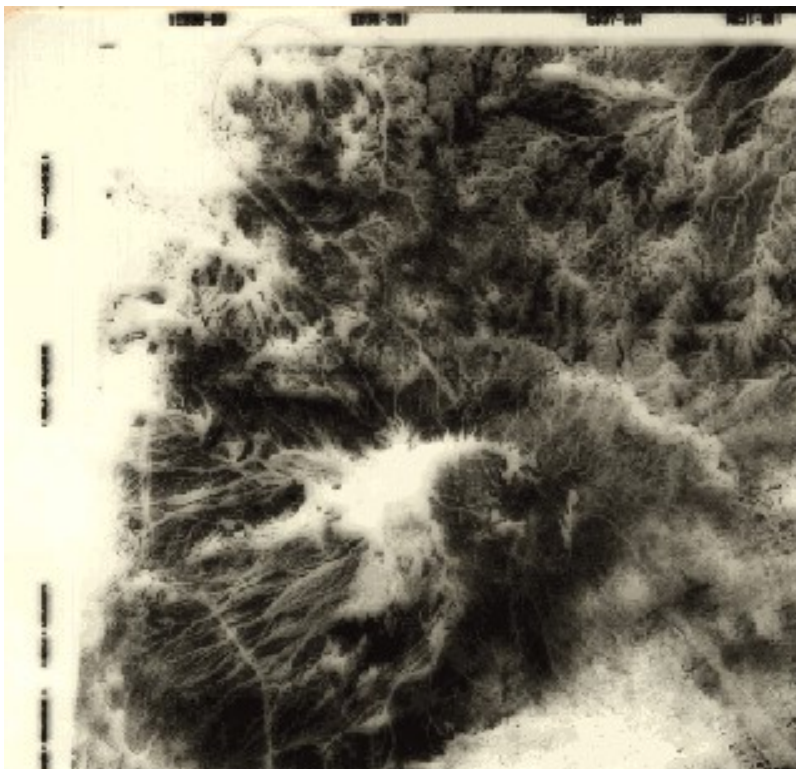


Figure 44 Jordanian Vortex - Al Jafr

The Figure shows an area of 100 miles by 100 miles making the actual vortex or drainage area approximately 500 square miles in size. One can actually see the drainage pattern leading into Al Jafr. The Dead Sea is reportedly the deepest point of land in a non-ocean area on earth, 1,299 feet below sea level. [144](#) However, the area shown in **Figure 44**, Al Jafr, Jordan, the depth to bedrock is 200 feet deeper than in the Dead Sea area. The depth to bedrock increases as one approaches Al Jafr from the west, however, little information is available for the Jordanian side. The number of Israeli wells that have logged to bedrock is small compared to those in Oklahoma which resulted in the Depth to Granite drawing, see Figure 79. Is this the point of the flood's waters returning "**neath the surface?**" Is this the actual center of Gottsland?

Conclusions

Israel is the center of the crossroads between the three continents, Europe, Asia and Africa. It has been the central trade route pivot since ancient times and this has resulted in it being conquered many times. The Scriptures indicate that in the end times, Israel will be the center of all the activity. God put His people in the center of the earth and from almost any standpoint it is the center, physically, spiritually, culturally and when Christ returns in the Second Advent it will be the center of government, and Christ will rule with a rod of iron. [145](#)

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113 Ezekiel 38:12; RSV - "in the center of the earth" **NASB** - "at the center of the world" **KJV** - "in the midst of the land"; **NIV** - "the center of the land"; **NCV** - "at the center of the world"; **TLB** - "and the whole earth revolved around them." [Return](#)

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115 Genesis 25:12-17. [KJV] Now these are the generations of Ishmael, Abraham's son, whom Hagar the Egyptian, Sarah's handmaid, bare unto Abraham: And these are the names of the sons of Ishmael, by their names, according to their generations: the firstborn of Ishmael, Nebajoth; and Kedar, and Adbeel, and Mibsam, And Mishma, and Dumah, and Massa, Genesis Hadar, and Tema, Jetur, Naphish, and Kedemah: These are the sons of Ishmael, and these are their names, by their towns, and by their castles; twelve princes according to their nations. And these are the years of the life of Ishmael, an hundred and thirty and seven years: and he gave up the ghost and died; and was gathered unto his people. [Return](#)

116 Genesis 32:3. And Jacob sent messengers before him to Esau his brother unto the land of Seir, the country of Edom. Genesis 32:3 [KJV] [Return](#)

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119 Ezekiel 47:13-23. [KJV] Thus saith the Lord GOD; This shall be the border, whereby ye shall inherit the land according to the twelve tribes of Israel: Joseph shall have two portions. And ye shall inherit it, one as well as another: concerning the which I lifted up mine hand to give it unto your fathers: and this land shall fall unto you for inheritance. And this shall be the border of the land toward the north side, from the great sea, the way of Hethlon, as men go to Zedad; Hamath, Berothah, Sibram, which is between the border of Damascus and the border of Hamath; Hazarhatticon, which is by the coast of Hauran. And the border from the sea shall be Hazarenan, the border of Damascus, and the north northward, and the border of Hamath. And this is the north side. And the east side ye shall measure from Hauran, and from Damascus, and from Gilead, and from the land of Israel by Jordan, from the border unto the east sea. And this is the east side.

And the south side southward, from Tamar even to the waters of strife in Kadesh, the river to the great sea. And this is the south side southward. The west side also shall be the great sea from the border, till a man come over against Hamath. This is the west side. Ezekiel 47:20

So shall ye divide this land unto you according to the tribes of Israel. Angers that sojourn among you, which shall beget children among you: and they shall be unto you as born in the country among the children of Israel; they shall have inheritance with you among the tribes of Israel. and it shall come to pass, that in what tribe the stranger sojourneth, there shall ye give him his inheritance, saith the Lord GOD. [Return](#)

120 Based on Ezekiel 28:13-16 , some place the Garden of Eden on Zion. [Return](#)

121 Genesis 12:1-8. [KJV] Now the LORD had said unto Abram, Get thee out of thy country, and from thy kindred, and from thy father's house, unto a land that I will shew thee: And I will make of thee a great nation, and I will bless thee, and make thy name great; and thou shalt be a blessing: And I will bless them that bless thee, and curse him that curseth thee: and in thee shall all families of the earth be blessed. So Abram departed, as the LORD had spoken unto him; and Lot went with him: and Abram was seventy and five years old when he departed out of Haran. And Abram took Sarai his wife, and Lot his brother's son, and all their substance that they had gathered, and the souls that they had gotten in Haran; and they went forth to go into the land of Canaan; and into the land of Canaan they came. And Abram passed through the land unto the place of Sichem, unto the plain of Moreh. And the Canaanite was then in the land. And the LORD appeared unto Abram, and said, Unto thy seed will I give this land: and there builded he an altar unto the LORD, who appeared unto him. And he removed from thence unto a mountain on the east of Bethel, and pitched his tent, having Bethel on the west, and Hai on the east: and there he builded an altar unto the LORD, and called upon the name of the LORD. [Return](#)

122 Genesis 22:2-3 . [KJV] And he said, Take now thy son, thine only son Isaac, whom thou lovest, and get thee into the land of Moriah; and offer him there for a burnt offering upon one of the mountains which I will tell thee of. And Abraham rose up early in the morning, and saddled his ass, and took two of his young men with him, and Isaac his son, and clave the wood for the burnt offering, and rose up, and went unto the place of which God had told him. [Return](#)

123 I Chronicles 15:3. And David gathered all Israel together to Jerusalem, to bring up the ark of the LORD unto his place, which he had prepared for it. [KJV] [Return](#)

124 Matthew 16:21 From that time forth began Jesus to shew unto his disciples, how that he must go unto Jerusalem, and suffer many things of the elders and chief priests and scribes, and be killed, and be raised again the third day. [KJV]

Mark 11:11. And Jesus entered into Jerusalem, and into the temple: and when he had looked round about upon all things, and now the eventide was come, he went out unto Bethany with the twelve. Mark 11:11 [KJV] [Return](#)

125 Acts 1:9 . And when he had spoken these things, while they beheld, he was taken up; and a cloud received him out of their sight. [KJV] [Return](#)

126 Revelation 14:1. And I looked, and, lo, a Lamb stood on the mount Sion, and with him an hundred forty and four thousand, having his Father's name written in their foreheads. [KJV] [Return](#)

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138 Genesis 11:1-4. [KJV] And the whole earth was of one language, and of one speech. And it came to pass, as they journeyed from the east, that they found a plain in the land of Shinar; and they dwelt there. And they said one to another, Go to, let us make brick, and burn them thoroughly. And they had brick for stone, and slime had they for mortar. And they said, Go to, let us build us a city and a tower, whose top may reach unto heaven; and let us make us a name, lest we be scattered abroad upon the face of the whole earth. [Return](#)

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143 Genesis 8: 1-3. [KJV] And God remembered Noah, and every living thing, and all the cattle that was with him in the ark: and God made a wind to pass over the earth, and the waters asswaged; The fountains also of the deep and the windows of heaven were stopped, and the rain from heaven was restrained; And the waters returned from off the earth continually: and after the end of the hundred and fifty days the waters were abated. [Return](#)

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145 Revelation 12:5 And she brought forth a man child, who was to rule all nations with a rod of iron: and her child was caught up unto God, and to his throne. [KJV]

Revelation 19:15. And out of his mouth goeth a sharp sword, that with it he should smite the nations: and he shall rule them with a rod of iron: and he treadeth the winepress of the fierceness and wrath of Almighty God. [KJV] [Return](#)

IN THE DAYS OF PELEG

by James P. Dawson

CHAPTER SIX

FROM GOTTSLAND TO THE PRESENT

Movement of the Continents from Pangaea

The single super continent as suggested by the Continental Drift, [145](#) **Figure 45**, has several problems.

1) What is the probability of Central America, point **A** in **Figure 45**, unfolding and connecting with South America at point **B**? (See **Figure 46**).

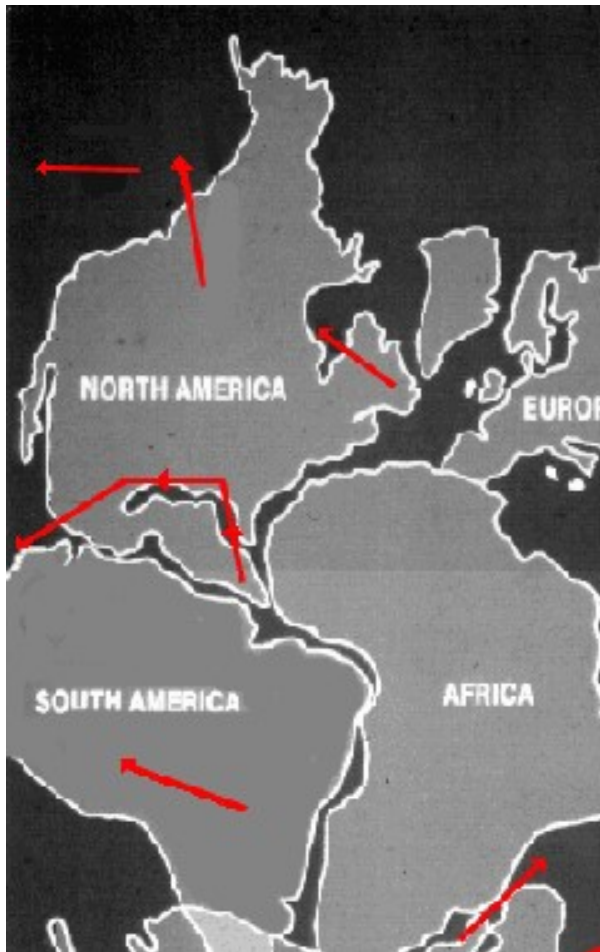


Figure 45 Continents within Pangaea



Figure 46 Central American Junction

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- 2) Assuming that the continents did physically connect at point **A-B**, what is the probability that the two independent areas at **A** and **B** have the same general soil types and that they form a continuous mountain range? The mountains are consistent from the South American continent through the Central American area to Mexico, **Figure 46**. The probability of this occurring by accident is extremely low, if not nonexistent.
- 3) The continents would have to move in such a way that points **C, D** and **E**, **Figure 45**, would align to form the intercontinental bridge that exists today, **Figure 47**.



Figure 47 Asian Land Bridge

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4) This continental arrangement also requires that India move from its original position and collide with Asia. [146](#)

Figure 48.

5) The continent of Australia must leave from its position below the tip of Africa and move in an east- northeasterly direction to its present location in the south Pacific. **Figure 48**

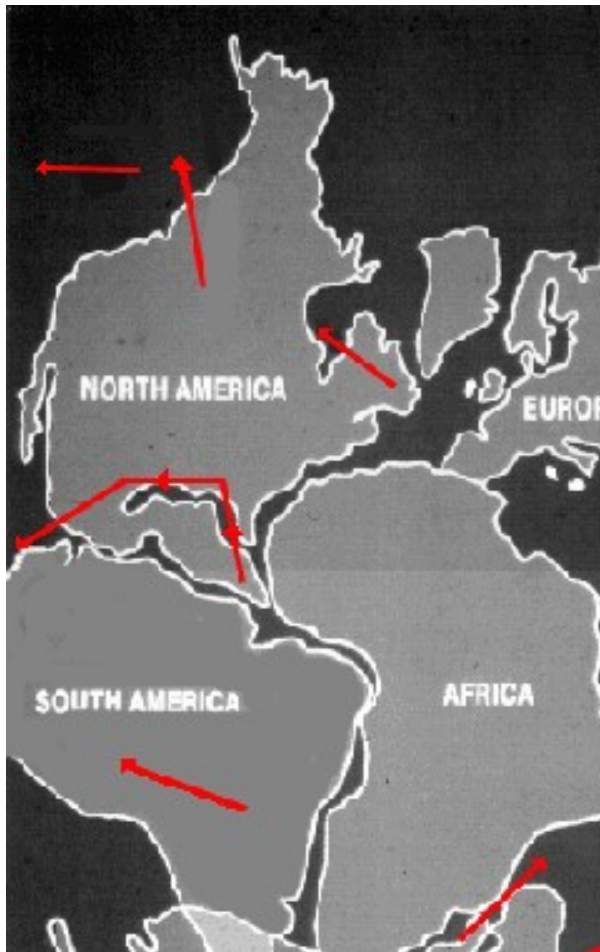


Figure 48 Pangaea Continental Movements

The above movement required for the continents to arrive at their present positions from the Pangaea super continent is represented in

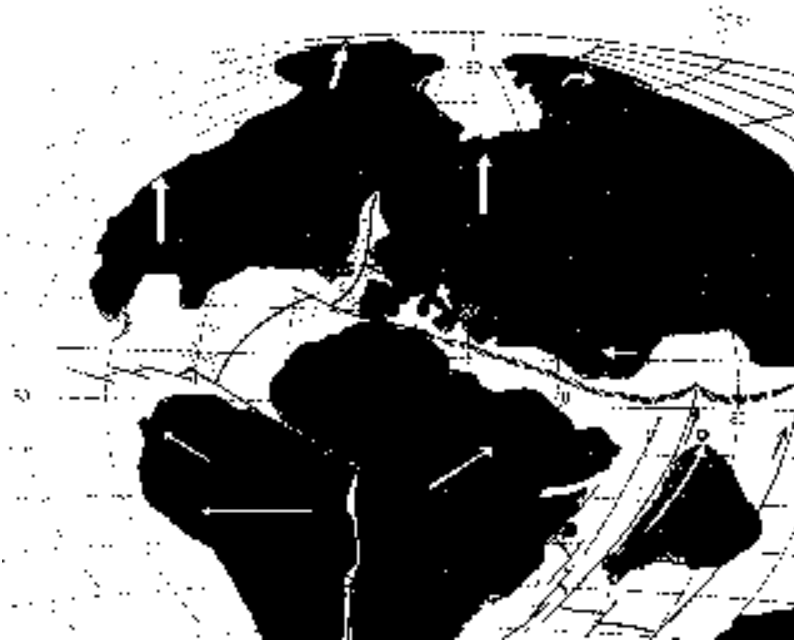


Figure 49 Continental Drift 65m,yr



Figure 50 Continental Drift 135m,yr

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by R. S. Dietz, Copyright 1970 Scientific American, Inc.

Figure 48 and is also shown in **Figure 49** and **50**, which are reproductions from the scientific literature. [147](#) The literature indicates that Figures 49 and 50 represent the position of the continents at a time of 65 million years and 135 million years respectively from the initial breakup of Pangaea. If the movement was initiated by some outside force,

and since the continents rest on a sphere, the movement should be in all directions, unless the force was directed south of Pangaea. In either case, the movement of the continents is inconsistent since Asia must move in a circular clockwise direction to make all the continents fit their current position. North America must move north and then west to accommodate the connection across South America while it is moving in a west-northwestly direction. If the magnetic poles experienced a reversal, this might supply the necessary force and energy to initiate the continental movement and could have initiated the north, west and east movements of the continents, but it could not account for the connection between Asia and Africa unless the African continent moved north. [148](#) If so, then the reasoning behind the southern tip of Africa being the center of the movement is invalid. The reversal of the earth's magnetic field, however, could account for the erratic polar wandering displayed by the alignment of the minerals to the magnetic pole. [149](#) (See **Chapter 2, Figure 8**)

The Plate Tectonic Theory does not account for the early movement of the continents. It assumes that the continents moved similarly to that proposed by the Continental Drift Theory and, once they were separated, they moved as plates. The main problem is that this requires that the plates have a continually changing boundary. As the Pangaea fragmented, the fragments were not the plates as described today. One must continually add plates to the theory to accommodate the existing physical evidence. The Plate theory does describe what is observed in the current continental movement if one makes this concession of continually changing boundaries and numbers of plates. The modern scientific literature concerning the Plate Tectonic Theory considers isolated areas, such as the coast of California or the Caribbean, and the theory works quite well for the restricted areas. It appears that the Continental Drift best describes the actions and the overall movements of the land masses.

Movement of the Continents from Gottsland

The arrangement of the continents called Gottsland is shown in **Figure 51**.



Figure 51 Continental Arrangement of Gottsland



Figure 52 Gottsland Spin

If the center of the movement was Israel, and as suggested by some of the authors the magnetic pole was through the center of the movement, one can suggest a possible mechanism for the supply of force necessary to start the continents drifting. **Figure 52** indicates that if the pole was through or near Israel, the earth would be spinning as indicated by the spiral lines. The earth would be spinning in its solar orbit, but the direction of spin is dependant upon which pole is being observed. It is assumed for this discussion that the earth is being observed from a position above the north pole. If the

pole shifted to the north, the force would cause the super continent to break, possibly as shown in **Figure 53**. The continents would continue to drift as shown in **Figure 54**.



Figure 53 Gottsland Breakup



Figure 54 Continental Drift from Gottsland

Physical Data from Sea-floor Spreading Investigations

The physical data from the ocean floor verifies these movements. **Figure 55** shows the physical ocean floor of the Atlantic. The sea-floor spreading discussed earlier is readily visible. The sea-floor is highly structured and the transform faults and ridges indicate that South America was connected to South Africa at some point in time. The east tip of southern Africa, when it broke free, traveled south and west. If one observes these

transform faults on a globe, the fault lines lead directly to the tip of South America, indicating that the southern tip of South America was connected to the eastern tip of Africa.



Figure 55 Sea-Floor Spreading in the South Atlantic

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As discussed earlier, there are good transform faults and ridges shown in **Figure 56** that indicate that something was connected to soil and geometric matches in this area for this connection.

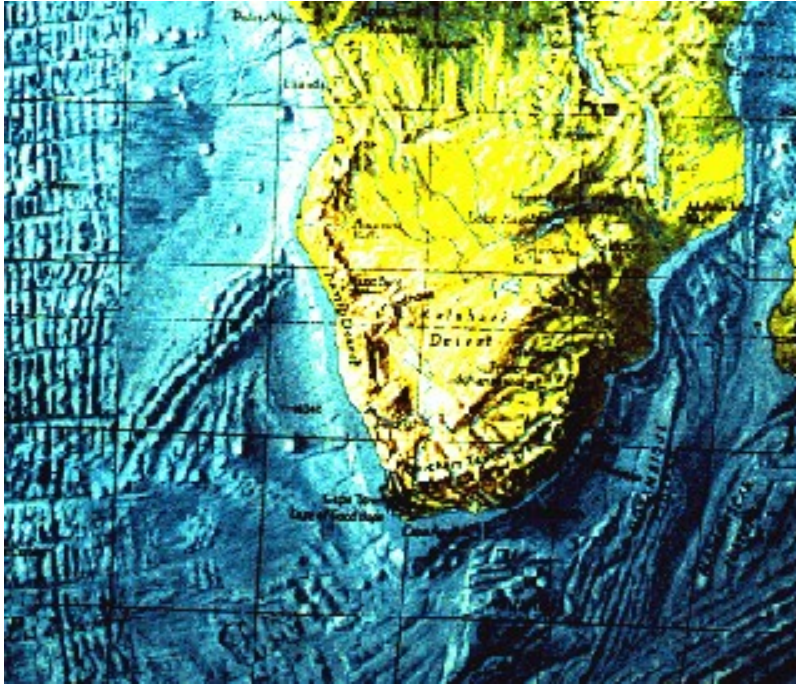


Figure 56 Southern Tip of Africa

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It is assumed that the southern tip of South America broke free before the Brazilian coast drifted away from the west coast of Africa, See **Figures 55** and **56**. This could account for the bend and crimp in the western coast of South America. The similar fault lines shown in **Figure 57** indicate that Australia was connected to the upper eastern coast of Africa and filled the Arabian sea. After Australia moved to the east, something broke free from the east coast of India and proceeded south. The fault lines lead directly to Antarctica. The fault lines encompassing the Indonesian and Philippine Islands indicate that they have broken free from the Asian continent and are proceeding southeast.



Figure 57 Antarctica/Australian Movements

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Formation of Mountains

The leading edge of the continent's movement usually results in the development of ocean trenches, as discussed in **Chapter 3**, or mountain ranges. This can be seen from the physical world maps and has occurred on every continent. The eastern coast of Australia shows such a mountain buildup on its leading edge of movement, **Figure 58**.



Figure 58 Australian Mountains

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The Indonesian Islands maps indicate both the development of ocean trenches and mountains on their leading edges. The leading edges of the continents in the Pacific, **Figure 59**, also show both ocean trenches and mountains on their leading edge. The direction of movement of the continents are indicated by the arrows. In most cases these leading edges of the continents are not the plate boundaries as dictated by the Plate Tectonic Theory.

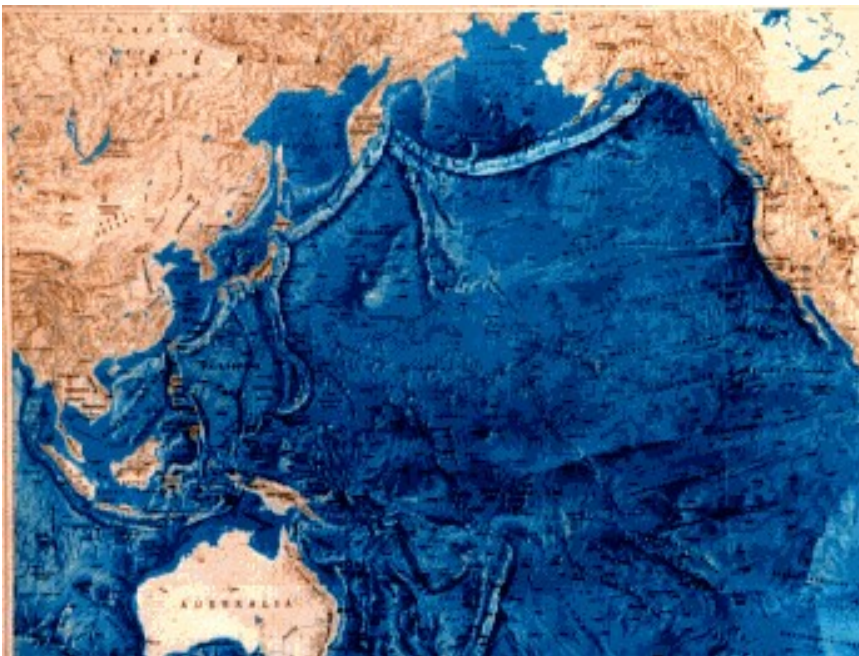


Figure 59 Continental Trenches in the Pacific Ocean

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The mountain build-up is not restricted to the leading edge of the continents movement, but can occur within the body of the continent. [152](#) **Figure 60** displays the mountain ranges in Europe and Asia.



Figure 60 European Mountain Formations

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The leading edges of the movement, the northern coast of Norway, point **A**, has produced a mountainous range along the entire state of Norway. The circular movement of the continents from the middle east has produced several areas of great stress such as shown by point **B**. The internal movement has caused a rift along the Volga River leading southwest from B and has raised the Ural Mountains. Another stressed area starts at the Jenisej River and results in the start of the Siberian mountains at point **C**. Points **D**, **E** and **F** show similar movements. All of these stressed areas lie on spiralic lines from the near Mideast or Israel.

Selected Area Movements

The area in the Mediterranean around Italy has a remarkable set of movements, **Figure 61**. Spain is moving North, putting strain on the Southern France connection. The Spanish mountains are arranged in curved lines with Gibraltar being the apparent center of the mountainous arcs.



Figure 61 Continental Movement in the Mediterranean Sea

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The soils of the western coast of Turkey, Point **A**, actually have a better match with the western coast of Israel and the Sinai, point **B**, than with Greece, as one might assume. If one places these two coasts together, the city of Pergamum, falls along the west coast of Israel.



Figure 62 Movements in the Gulf of Mexico

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The area of Yugoslavia is moving to the northeast as indicated by the arrow and probably has caused the Carpathian Mountains to be formed. Italy as a whole, is moving toward the southeast, but the tip of the boot is turning toward the northwest and the northern part of Italy is pushing north resulting in the Alps. In effect, Italy is trying to spin. This spin is similar to an eddy current in continuum flow environments. If one drags a stick through a body of water, small circular eddy currents can be observed behind the stick's movement. These same phenomena appear to be occurring in Italy's movement. This movement also places great strain on the ankle of the Italian boot and could account for the volcanos and earthquakes of the area throughout history. This is not an isolated case in the continental movement. Florida was once connected to the northern gulf coast and is moving toward the east, **Figure 62**. The Caribbean Islands are moving toward the northeast as an expanding unit while Grenada and the southern islands in the chain are also sliding to the north. The Bahamas, moving in a westerly direction has developed the Bahamian Trench off the coast of Florida where subduction is apparently occurring. Korea is another area where the peninsula is pivoting around its continental connection in contrast to the general movement of the leading edge of the continent, **Figure 63**. However, Korea and the Caribbean are rotating counter clockwise while Italy is rotating in a clockwise manner. This type of movement is typical of disturbances within continuum flow environments.



Figure 63 Movements of Japan and Korea

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Inner Continental Mountain Ranges

Another anomalous movement concerns the Tibetan Mountains north of India. These mountains have led many to believe that India was originally located at the southern tip of Africa and moved north to collide with Asia and resulted in the formation of the Himalayan Mountains, **Figure 64**.



Figure 64 Asian Continental Mountain Ranges

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But if Gottsland is the correct image of the original super continent, then this explanation is not valid. In physics, for every forward action there must be an equal reverse action. If the pole shifted to the north, then there would be a force directed to the south of almost equal strength; but the force to the south would create an almost equal force to the north. This interplay of forces would create an oscillating force that was continually decreasing. This is similar to a bouncing ball where the height for each succeeding bounce is less than the preceding one. When Australia and Antarctica broke free from the sides of India such an oscillating force field reaction would have been initiated, and this interaction could have caused the Himalayan buildup. It is interesting to note that the height of the Himalayas decreases exponentially to the south as one would expect if the initiating force was decreasing exponentially. The buildup of the Himalayas would be in direct opposition to the movement of the Asia continent as discussed earlier and shown by the red arrows in **Figure 64**. This continental movement was altered by the creation of the Himalayas, white arrows in **Figure 64**, and resulted in the movement from point A around the eastern end of the Himalayas as shown by the yellow arrows in **Figure 64**. This is not the only evidence of this type of mountain formation. The Arabian peninsula, shown in **Figure 65**, has a force field associated with its movement as indicated by the arrow.



Figure 65 Arabian Peninsula Oscillations

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The peninsula force field is oscillating between points **A** and **B** and has resulted in the mountainous buildup at both points. One can cover the entire globe and rationalize the formation of most mountains based on the force fields associated with the continental movement. This does not constitute proof of the mechanism, but the circumstantial evidence and the fact that it does hold in essentially all cases gives it the structure of a plausible theory.

Firelines and Earthquakes

The earth's major earthquakes occur mainly in belts coinciding with the margins of tectonic plates or the leading edge of the drifting continents, but some do occur in the interior of the continents and along the mid-ocean ridges, [150](#) such as shown in **Figure 66**.



Figure 66 Firelines from the Americas

The Aleutian Islands' movement to the south has also resulted in earthquakes along their leading edge and at the Aleutian trench, as shown in **Figure 66**. The earthquakes along the California coast are generally from movement along the San Andreas fault. [151](#) The Baja California peninsula is swinging out into the Pacific and is continually placing greater strain on the San Andreas fault which results in the California earthquakes. Central America and North America appear to be moving faster than South America and this is placing greater stress on the central American area and has resulted in an inordinate number of severe earthquakes in Central America and Mexico as shown in **Figure 66**. Earthquakes are normally caused by slippage of the earth along fault lines, **Figure 67**.

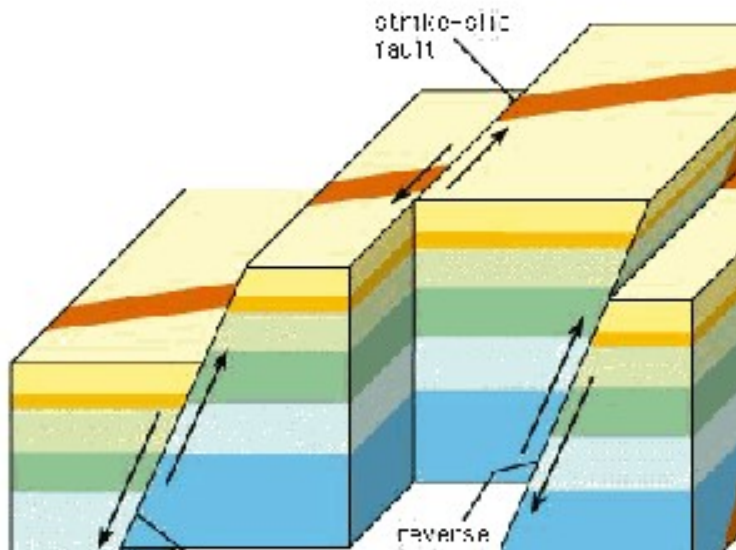


Figure 67 Types of Faults

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Volcanos are usually the result of continental subduction, **Figure 68**, at the leading edge of the continental movement, but both Earthquakes and volcanos do occur along the mid Atlantic ocean ridge as shown and the sea-floor spreading models have explained these phenomena. The movement of the Caribbean Islands to the north and east have created both volcanos and earthquakes all along the Caribbean chain. The leading edge of South and North American continents has been riddled with major earthquakes during this century and these quakes are probably caused by subduction, see **Figure 68**.

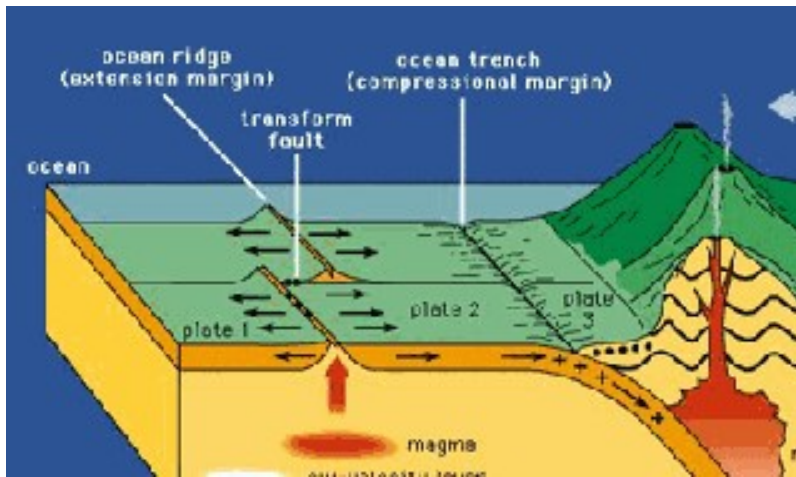


Figure 68 Ocean Trench/Volcano Formation

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Australia is like a ship coming out of port, the Arabian Sea, and the earthquake and volcanos, the fireline, makes up the wake of this ship, **Figure 69**. The earthquakes and volcanos of Japan are well documented and the resulting fireline is the leading edge of the movement of the Asian continent into the Pacific. The earthquakes in and north of the Himalayas is the result of the movements as discussed above.

The firelines are essentially all converging in the Pacific Ocean. If one takes the average speeds of the continental movement reported in the literature, it would appear that the force fields (firelines) will converge at a point near the back diameter of Israel, **Figure 71**.

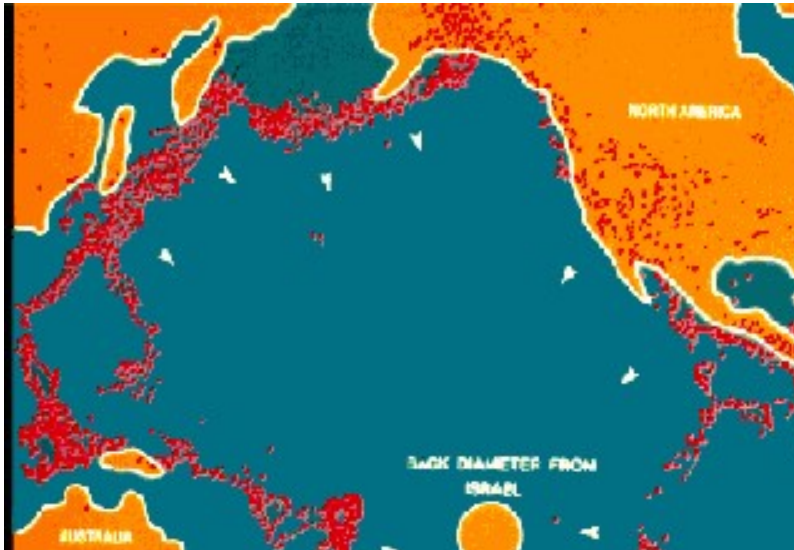


Figure 71 Pacific Ocean Firelines

One cannot be adamant about this point because of the large variation of the reported speeds of the continental movement in the literature. However, it does indicate that the force was delivered somewhere in the Mideast. One would expect the force fields to travel evenly from the center of application and converge on the back diameter if the media was a sphere. It would be similar to dropping an object in the center of a vat of water; the ripples caused by the object hitting the water would move away from the center in circular rings. It should be the same on a sphere. **Figure 72** displays a polar view of the earth's surface with the center at the southern tip of Africa as shown in a Scientific American article. The firelines are shown in red. If one moves the center of the projection to Israel, the firelines in the southeast are pulled toward the center and the firelines make an almost perfect circle. This would be in keeping with the laws of physics and reflect all of the reported data.

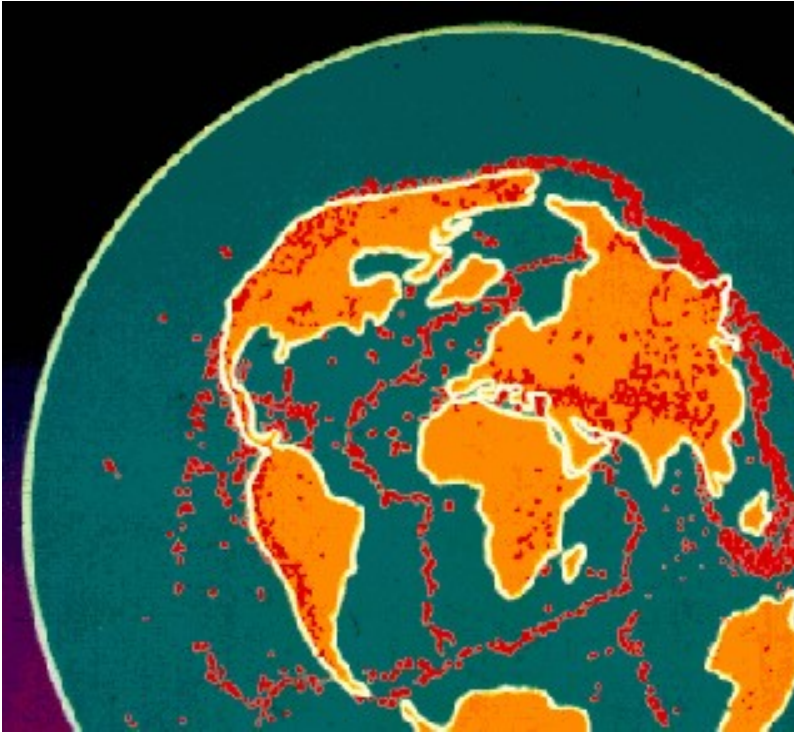


Figure 72 Global View of Firelines

Conclusions

The movement of the continents, the formations of the mountains and the distribution of the firelines, all indicate that the center of the initial movements was located at or very near Israel, and that the arrangement of the initial land mass was very similar to, if not that depicted by, Gottsland.

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I would like to have your comments on this article, please mail to [JPDawson](#)

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IN THE DAYS OF PELEG

by James P. Dawson

CHAPTER SEVEN

CONSIDERATIONS FROM GOTTSLAND ARRANGEMENT

Earth's Magnetic Field

The scientific literature has suggested that the earth's magnetic field may have reversed sometime in the past.[153](#) If one assumes that the axis of the earth was through the center of Gottsland, then such a reversal may have supplied the force required to set the continents adrift. If the axis was through the center of Gottsland, it would have been the magnetic pole. Then the north pole would have had to move to its present location, and the axis of rotation changed accordingly. This could account for the observed evidence for polar wandering [154](#) and also supply the initial energy or force to set the continents adrift.

The laws of physics require that for every forward action there be an opposite and equal reaction. Either the shift in the pole or the reversal of the magnetic field would give this same result, pushing the continents away from the center. This interaction would also produce the oscillating decaying force fields necessary for some of the observed mountain building. It is assumed that the initial movement of the continents would be quite fast and then continually slow down, probably as an exponential decay curve. It is assumed that the size of the break away continent would greatly influence the movement due to the viscosity of the earth's mantle.[155](#)

The greatest magnetic field would be at the poles due to the concentration of the flux lines, as shown in **Figure 73**.

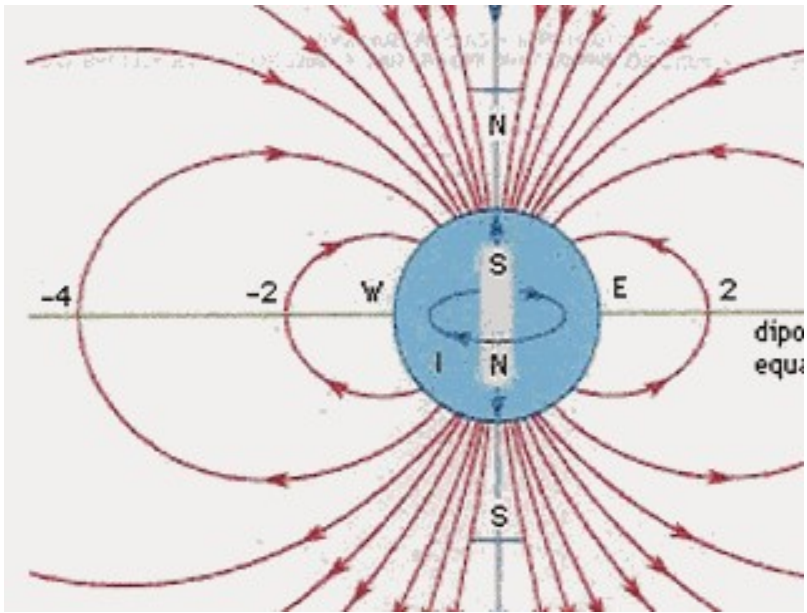


Figure 73 Earth's Magnetic Flux Lines

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Vortex Formation

Is there a physical phenomena associated with the pole? The concentration of flux lines represents a magnetic vortex [156](#) at the poles and one would expect to see a physical sign of this vortex. If Al Jafr, **Figure 74** was the pole and the center of the continental movement, this could be the magnetic vortex.

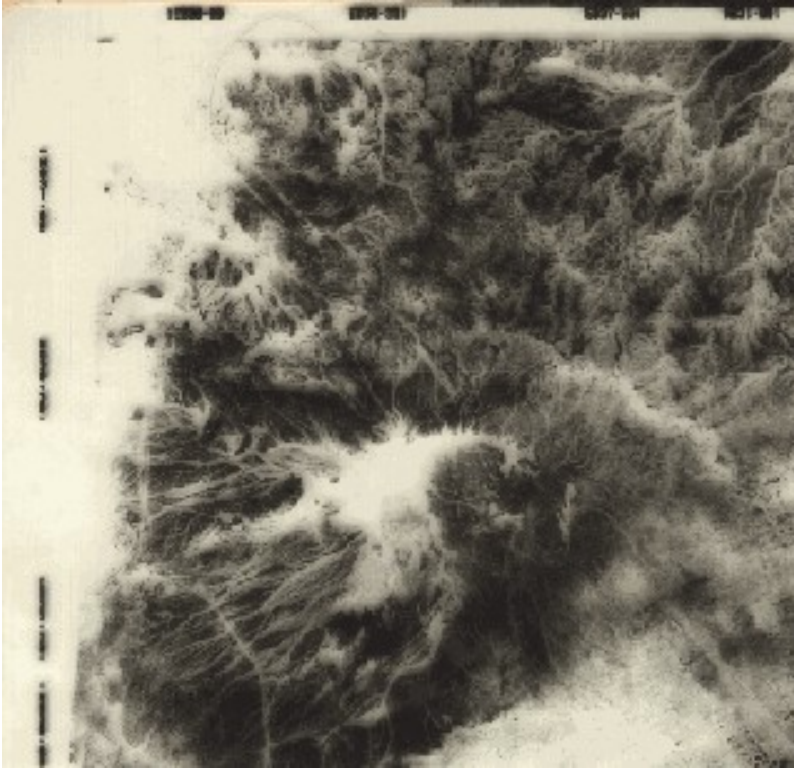


Figure 74 Al Jafr, the Mideast Vortex

Left/Right Hand Rule

This would make it the center of all the phenomena that has been discussed. In physics there is a rule governing electromagnetic fields, spin and torque. If the axis along which the particle or energy travels is the north pole, and if the spin vector points in the westerly direction it would be demonstrating the Left-hand rule, as illustrated in **Figure 75**. If a magnetic field exists in the direction of the fingers and a current is passed through the fingers, then a thrust or torque would develop at a right angle to this movement in the direction the thumb is pointing. This is the electromagnetic function of an armature in an

electric motor.

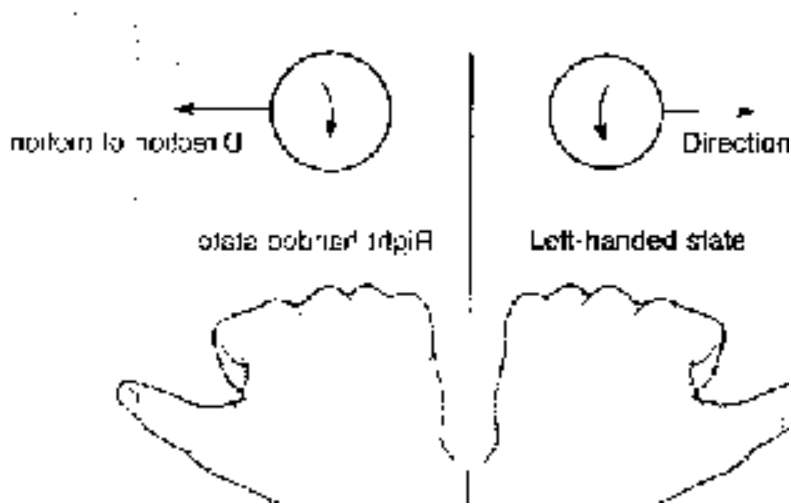


Figure 75 Lefthand Rule in Physics

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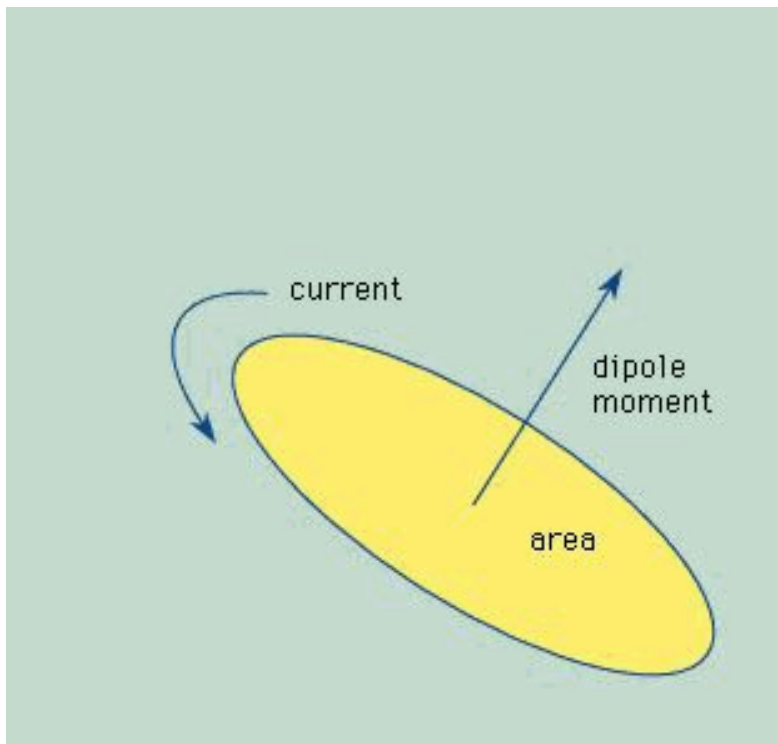


Figure 76 Magnetic Dipole

The earth must react in the same manner if the same types of electromagnetic force are applied. If the axis shifted from the Middle East to the North Pole, it would not necessarily change the spin, but the direction of the magnetic field. Therefore, one would

have a momentary torque at a right angle to the plane of the magnetic field change as shown in **Figure 76**. Another way to visualize these phenomena is to consider the earth as a balloon full of water. If one rotates the balloon quickly to the right, the fluid interior and the gravitational pull would cause it to bulge at the bottom and pull down at the top. When the rotation is stopped, the balloon would return to a steady state position. The effect of the magnetic field would cause this to occur at right angles to the movement of the axis. The earth does experience this type of bulging. [157](#) Rotation causes the earth to bulge around its center, and the gravitation of the sun and the moon pulls the bulge toward the ecliptic plane. As the earth resists the pull, its rotational axis moves causing precession. [158](#) If the axis of the earth shifted from the Mideast, the torque would be applied at a right angle to the direction of movement, **Figure 77**, causing an initial bulge at a right angle to the movement and then a relaxation of the surface and a return to near normal position.

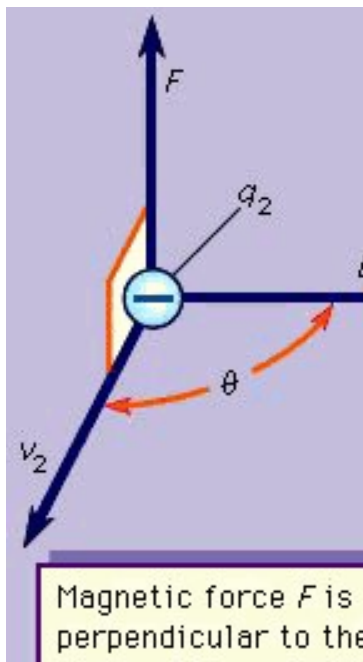


Figure 77 Torque from Magnetic Force

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The right angle point occurs in the Arbuckle Mountains in Oklahoma. [159](#) Figure 78 is the map of the geologic provinces in Oklahoma. The map shows that all the geologic provinces are converging on a point at the center of the Arbuckle mountains, point A, **Figure 78**.



Figure 78 Oklahoma Geologic Province Map

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The rotation around this point is shown by the movement of the Quachita Mountains, points **B**. These mountains are moving very slowly in the direction of the arrow. This has been shown by data derived from oil and gas wells in the area. The wall thickness of the well casing used is four times the thickness used in similar wells in the western side of Oklahoma. If one does not use the heavier, stronger walled casing, the well casing will collapse over a period of time, due to the movement of the mountains. The amount of movement over time varies with the depth from the surface placing great strain on the casing. As one proceeds in any direction from the center of the Arbuckle, the depth to granite decreases, until a depth of about 4,000 feet occurs, as shown in **Figure 79**.

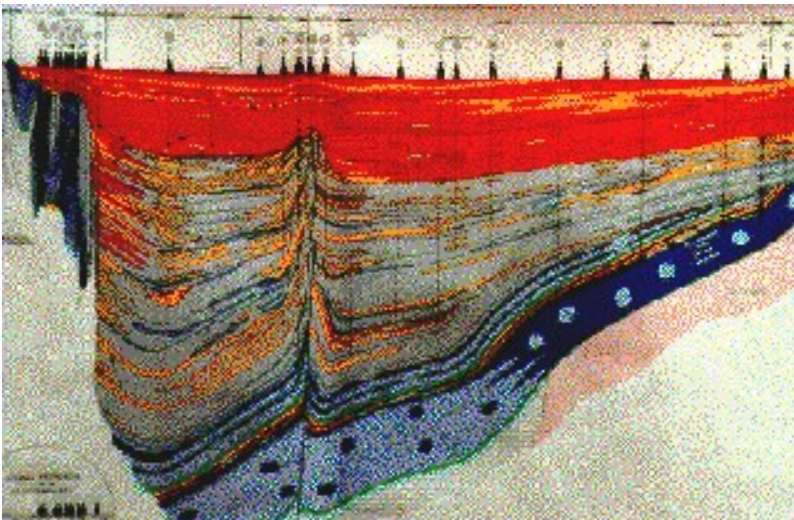


Figure 79 Depth to Granite in Oklahoma

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Figure 79 is a diagram of oil well data showing the various horizons as a function of depth. These data were taken from wells from point **A** through point **B** in **Figure 80**.



Figure 80 Well Location for Depth to Granite Diagram

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Similar diagrams can be drawn from well data going in any direction from the Arbuckle. This depth is predominating in northern Oklahoma, Kansas, and Nebraska and is similar in the other directions. [160](#) The composite diagrams, based on the depth to Granite, produce a vortex at the Arbuckle mountains, similar to that shown in **Figure 81**.

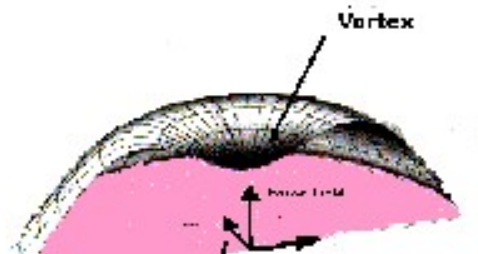


Figure 81 Vortex

A negative vortex would be similar to a sink hole on the earth or a black hole in space where everything flows into the vortex. A positive vortex would function as a source of material similar to a volcano or a source of energy, and energy is normally dissipated in a spiraling manner. The change in magnetic poles could produce a momentary negative vortex and when the surface returned to a steady state, this vortex could become a point of energy distribution or a positive vortex. Essentially all vortexes functioning in a

magnetic or gravitational field are spiraling in nature. The high and low pressure systems in meteorology are this type of vortex. The center point has a clockwise rotation if it is a high pressure system, and the reverse if it is a low. A hurricane is a good example of a spiraling vortex that is dissipating energy, the eye being the center and the spiraling force fields represented by the gale winds and rain patterns. A galaxy is a two-leg spiral when it is first formed, **Figure 82B**, and a full spiral when mature, **Figure 82A**.

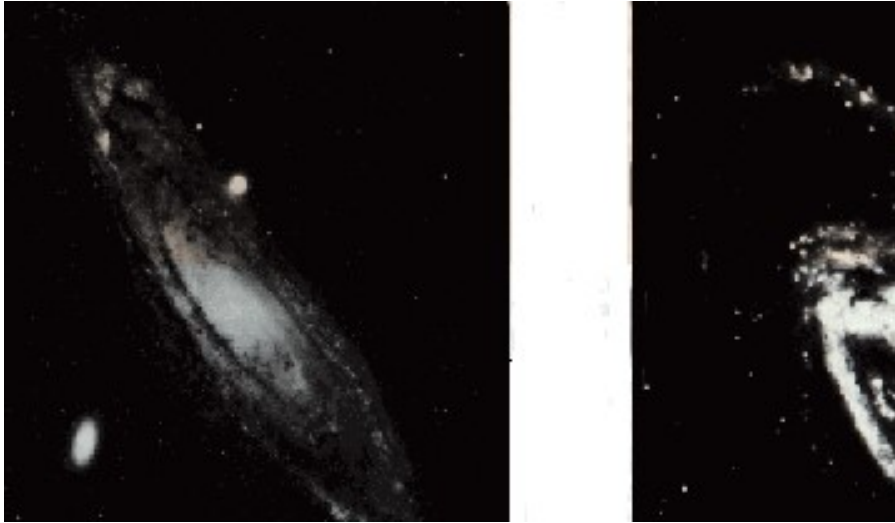


Figure 82 A and B Galaxies

Figure 83 displays the Orion Nebula and its resemblance to the vortex at Al Jafr, **Figure 74**, is remarkable, and it is also very similar to many biological growth colonies.

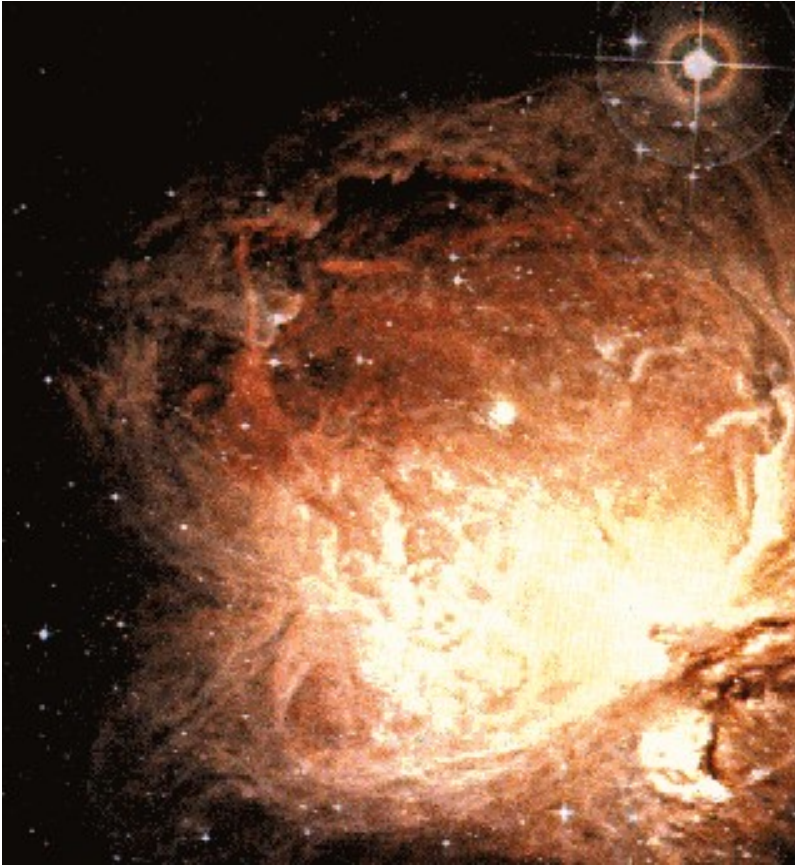


Figure 83 The Orion Nebula Galaxy

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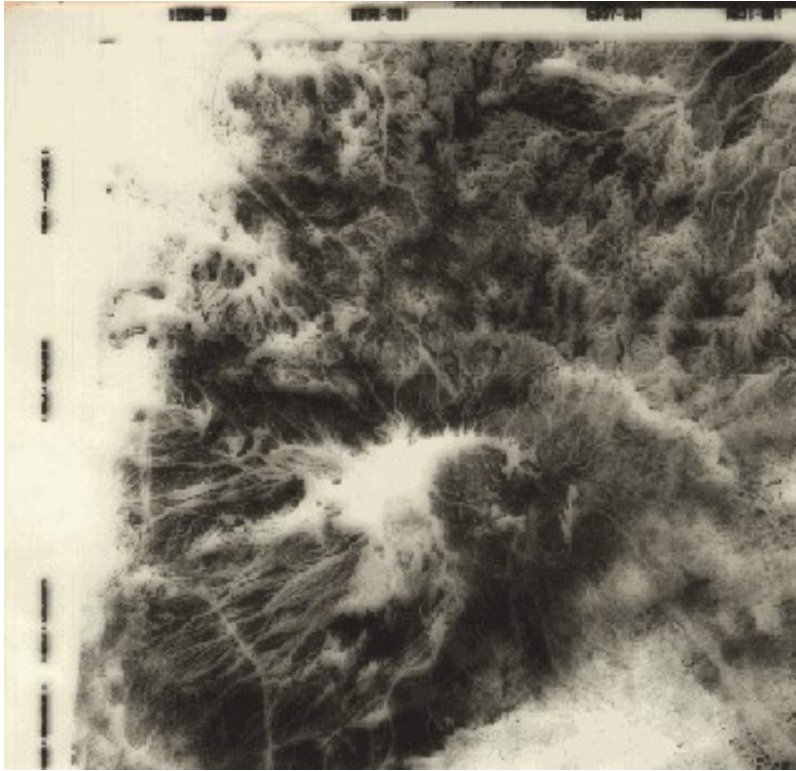


Figure 74 Al Jafr, Jordan, the Mideast Vortex

If one plots the growth of some of our large cities, the same general pattern is developed. This spiraling attribute is present throughout nature. Pull the plug in the bathtub and one immediately witnesses a negative vortex. Vines grow in a spiraling manner. A vine that spirals to the right north of the equator will spiral to the left south of the equator because this is governed by the earth's magnetic field. The trade winds and the trade currents in the ocean are all governed by these same force fields and result in the same types of spirals. In biological systems this spiraling nature persists. The DNA molecule, the building block of nature, is a spiral; the seed wart and the ringworm grow in spiral vortexes. Essentially any natural system, when taken at its base, will display this same nature.

Arbuckle Mountain Vortex

Then what is the special nature that exists in the vortex at Al Jafr in Jordan and the Arbuckle mountains in Oklahoma? If one overlays a map of the producing oil and gas fields in Oklahoma, **Figure 84**, on **Figure 78 above**, the map of Oklahoma Geologic Provinces reproduced here for comparison, it becomes evident that the oil and gas production is a function of the geologic province.



Figure 84 Oklahoma Oil and Gas Production Fields

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This has been the corner stone of oil and gas exploration for decades, but if one applies the information derived from the vortex distribution of energy to these same data, a much broader picture can be developed. The oil and gas production map for Oklahoma, the Texas Panhandle, portions of Arkansas and Kansas, where the green areas indicate oil production and the red areas are producing gas

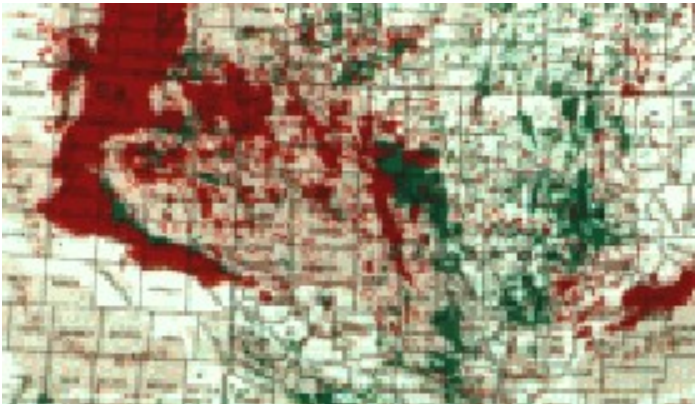


Figure 85 Oil & Gas Fields in Oklahoma and Texas Panhandles

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Figure 85, indicates that the oil and gas fields tend to center at the Arbuckle Mountains and the oil and gas fields alternate and grow larger as one progresses from the east to the west.

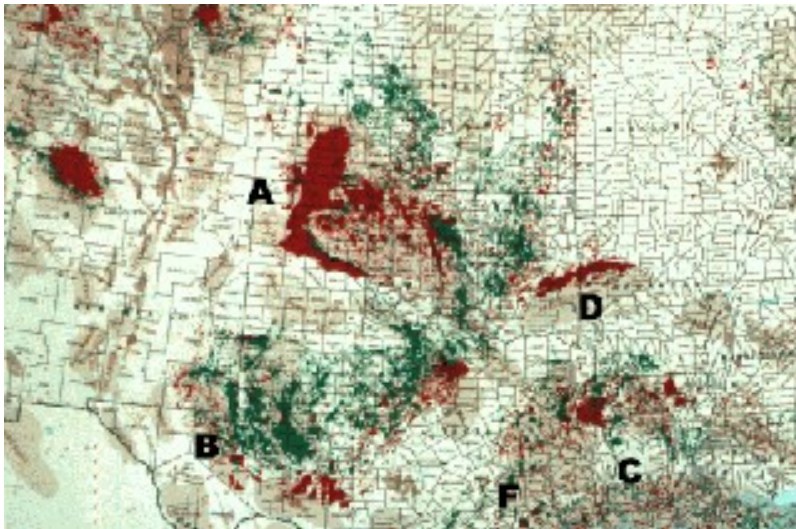


Figure 86 Oil & Gas Fields in the Southwest United States

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If the coverage is expanded to include all of Texas, New Mexico and Colorado the spiraling nature of the oil and gas distribution takes shape, **Figure 86**. The oil and gas fields exhibit the same "eddie type currents," points **A**, **B**, and **C**, **Figure 86**, as one observed in the movements of the continents, particularly in the area of Italy in the Mediterranean Sea. Finally, when one observes the oil and gas fields of the entire United States, **Figure 87**, the vortex is remarkably visible.



Figure 87 Oil & Gas Fields in the United States

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The vortex should have eight legs, one leg goes through the Hugoton gas fields, Point **A**, **Figure 87**, in the Texas panhandle and southeastern Colorado and extends through the powder river basin of Wyoming, point **B**, and into the Calgary oil fields, point **C**. Another leg extends through the Arkoma gas basin in Arkansas, point **D**, and into the oil,

gas and coal fields of the east, point **E**. Point **F** shows the displacement of the oil and gas fields due to the reverse action of the Florida and Cuba movement. Note that the shape of the fields is consistent with the shape of the coast and falls in concentric lines. Similarly, all the basins in the United States can be represented as coming from one of these spiralic legs out of the vortex center in the Arbuckle mountains of Oklahoma. Another observation concerns the formation of the coal fields. The coal deposits in Oklahoma are on the frontal edge of the Quachita Mountain movement, point **D**, **Figure 86**. Similarly, the coal fields in the eastern states are located on the frontal movement of the Appalachian Mountains and the Smokeys, **Figure 88**.

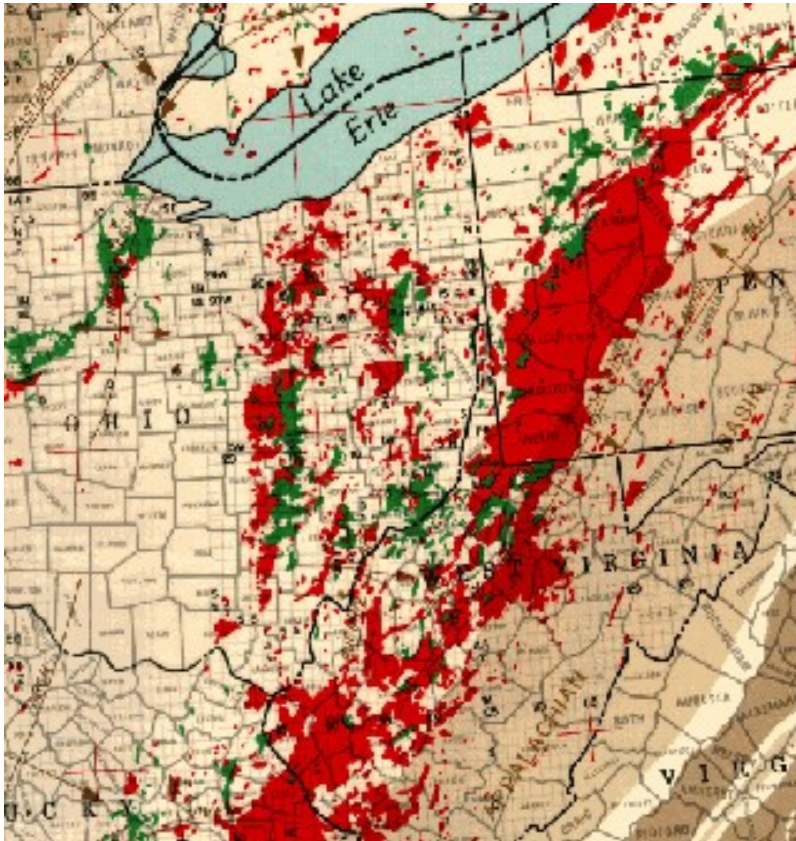


Figure 88 Appalachian Coal Deposits

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Apparently the movement of the earth compresses the oil deposits forming coal, and this process is usually accompanied by the liberation of methane, natural, gas. This gas is the active ingredient in most coal mine explosions.



Figure 89 Kennedy Basin

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The occurrence of oil and gas deposits should be consistent along each leg of the vortex and has been found in most instances. However, the area of the vortex leg between eastern Colorado fields and the Powder River Basin has repeatedly produced dry holes, or at best, minimal oil production, point **A**, **Figure 89**. This is not a direct contradiction to the vortex system, but it does demonstrate one of the problems. The oil/gas basin that should have been in between the Colorado and the Powder River basins, as dictated by the vortex theory, has been displaced because of the uplift, Point **B**, and the force field has pushed the basin toward the east, and the basin does occur at point **C**. This basin has been found to contain oil and is known as the Kennedy basin. Such basin displacement

occurs in several areas along the spiraling vortex legs.



Figure 90 The Vortex Lines from Al Jafr

Since this oil and gas distribution phenomena occurs at the Arbuckle vortex, can these observations be applied to the vortex at Al Jafr on the Israeli side? A system of spiraling legs from a vortex at Al Jafr may resemble that depicted by **Figure 90**. One can draw the vortex legs in such a way that they do pass through the oil fields in Saudi Arabia, Iraq, and Iran, as well as the Libyan fields. A complete production map for the eastern hemisphere is not available and one cannot be certain about the angle between the legs of the vortex. But in order to pass a leg of the vortex through the North Atlantic oil fields and the European coal fields, the leg must pass through Israel.

Several oil companies have used Deuteronomy 33 as the basis for drilling for oil in Israel. They assumed that **Deuteronomy 33:24**, "**Asher shall dip his heel in oil,**" and **Deuteronomy 33:19**, Zebulun and Issachar will "**Suck their treasures from beneath the sand,**" to mean petroleum. These interpretations of Scriptures have been the basis for several exploration and drilling ventures in Israel. Andy SoRelle [162](#) and Gilman Hill [163](#) drilled in the area belonging to the tribe of Asher without success. The results of the Moriah Trust exploration through Jayphil Corporation yielded several promising sites for drilling. These sites are shown in **Figure 91**. The yellow areas represent sites selected for drilling based on the results of Jayphil's analyses of the satellite data and the radiometric and induced polarization field measurements. These sites have not been tested due to the instability of the Israeli government. The sites are all on the West Bank with the exception of one site at the southeast base of Mount Carmel. The green line is the boundary of the West Bank. The Jayphil Corporation's success rate is 90 percent; therefore, the sites are considered promising.

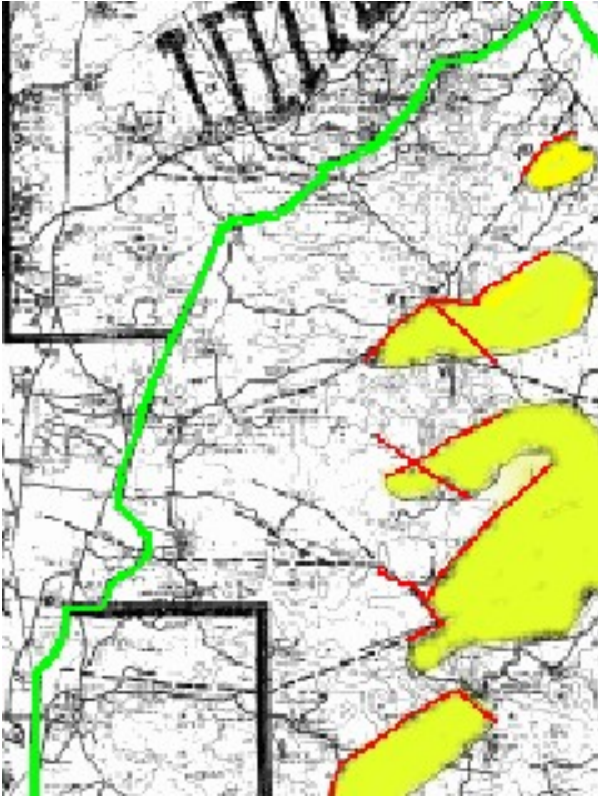


Figure 91 Possible Drill Sites in Israel

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Conclusion on Gottsland Arrangement

The arrangement of Gottsland meets all the criteria for the Continental Drift and the movement is consistent with the laws of Physics which would govern such movement. The Vortex theory based on the Gottsland arrangement enables one to plot all the existing oil fields in the world with a high degree of accuracy and lends credence to the basic arrangement and logic.

There are numerous events that could have occurred to supply the energy to initiate the continental drift, but none of the possible explanations can be proved. The Scriptures state that in the beginning God spoke the universe into existence, and in Genesis 10 it simply states the earth was divided, but it does not define a mechanism.

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- 162 Andrew C. SoRelle**, Energy Exploration, Houston, Texas, drilled a well at Alite on the coast south of Haifa in 1981-1983. He indicated that this would be the heel of Asher. [Return](#)
- 163 Gilman Hill**, Moriah Trust, Denver, Colorado, drilled Elijah I on Mount Carmel in 1981-1982. Moriah Trust did extensive exploration for the Israeli government, utilizing the services of the Jayphil Corporation for satellite, radiometrics, and induced polarization studies. [Return](#)

IN THE DAYS OF PELEG

by James P. Dawson

CHAPTER EIGHT

FINAL CONSIDERATIONS

Unknown Initial Force

There are several important questions that remain to be answered by the Continental Drift, Plate Tectonic, or the Gottsland/Vortex Theories. One is what initiated the breakup of Gottsland or Pangaea and caused the continents to move. One of the possibilities given in the Plate Tectonic theory is that convection caused the movement. This could not be the explanation because when the super continent existed, the displacement of the earth's crust by convection would not deposit the crust in a location that would cause the continent to break apart. The convection mechanism does accurately relate what is currently observed, but it was not the initial energizing force. The near pass of a comet has also been proposed, where the gravitational pull would be excessive and cause the super continent to fragment. Some scientists have suggested the earth would be **"off balance"** because of the location of the land mass and this would cause **"wobbling"** of the earth and would put an undue strain on the super continent, causing it to break apart. The most accepted theory is that the shift in the magnetic pole caused the initial breakup of the super continent, but this cannot be verified. There has been no totally acceptable explanation for the breakup of the super continent.

The Continental Drift Theory does represent the current observations of the continental movement. The Plate Tectonic Theory does explain the movement and interaction of the continents in modern times. The Gottsland/Vortex theory does present a better arrangement of the continents in the super continent, because of the soil/coastland/fossil matches, and presents a better explanation of the continental movements from the super continent, but it does not explain the initial cause for the movement. It does strongly suggest that the force was delivered at one time at or near Israel or Al Jafr. The laws of physics have not been violated in any of the continents' movements from the Gottsland arrangement, but there are problems associated with the Pangaea arrangement. The Gottsland Theory does present a logical explanation of mountain building and the formation of rifts and rivers within the interior of the continents. The other theories do not explain these interior continent events. The literature suggests that a shift in the magnetic pole **or** a reversal of the magnetic field could have supplied the initial energy for the super continent breakup. In the case of the Gottsland Theory this seems highly unlikely. A shift in the magnetic pole would cause a torque at a right angle as previously explained; but if this shift in the pole caused the movement, the American continent would not have been in the position to reflect the right angle torque. Since the vortex (right angle torque) is in the state of Oklahoma, the continent must have been essentially in its present position when the pole shift took place.

At this point there does not seem to be a totally acceptable solution to the initial force paradox. There are numerous events that could have occurred to supply the energy to initiate the continental drift, but none of the possible explanations can be proved and most of them will not fit all of the variables. The Bible states that in the beginning God spoke the universe into existence, and in Genesis 10 it simply states the earth was divided but does not define or hint at a specific mechanism. He may have spoken, and the continents were set adrift.

Time Function

The scientific theories and the Bible are in agreement that there was a super continent. But they differ greatly in the time frame in which the continents were set adrift. The scientific theories indicate that Pangaea started breaking up millions of years ago, [164](#) whereas the Bible states that it occurred in the days of Peleg. [165](#) If one takes the Biblical chronology literally, then the breakup of Gottsland was approximately 4000 years ago. This difference in time frames presents a significant problem. It has been suggested that a continental breakup in Peleg's time, approximately 2000 B. C., would have caused great destruction on the earth and history shows evidence of civilization before that time. The affects of the continental breakup would be a function of how the event occurred and the point of reference. The scientific community agrees that the volcanic action and earthquakes are probably caused by the subduction and movement of land masses or plates, but this would occur only on the leading edge of the continental movement, not in the interior of the continents. There probably would have been surface destruction at the breakpoint of the continents, but probably would not have been much effect on a very large percentage of the continent. For example, if a closed car is speeding down the highway at 70 miles per hour and a fly flies from the back seat to the front seat, is he flying 70+ miles per hour? The answer is relative to the point of reference. If the point of reference is outside the vehicle, the answer is 70+, but if it is inside the vehicle it is just a fraction of one mile per hour. The fly's speed is relative to his stable environment. The atmosphere in the car is not moving with respect to the fly. It would be the same problem when the earth was divided. The atmospheric sheath would not necessarily be affected and ones in the interior of the continent would not notice a great change in their immediate environment and the area in the center of the movement would experience very little destruction if any. Thus the people around the center of the continental movement would probably experience little or no disruption because there would be little or no perceivable movement at the epicenter. Any point on earth is traveling at more than 1000 miles per hour, relative to a reference point outside the atmosphere, but would be stationary if the reference point is on the earth. One does not experience any sensation of the speed because our environment moves at the same speed. The earth and its atmospheric sheath are also traveling 33,000 miles per hour in its orbit around the sun, but only the radiation effects are felt on earth.

The scientific literature suggests that the breakup occurred 465 million years ago. This date is based on the sea-floor spreading measurements of 1.5 cm/yr, [166](#) which converts to 126,000 yrs/mi or 760 million years for the separation of the North American continent from Europe. The Sea-floor spreading movement data are based on estimates utilizing the

information available. Scientific equipment and instrumentation were not available for direct measurements of this small incremental movement at the ocean depths of the midatlantic rift. Measurements taken during the International Geophysical Year (1967-68) indicate that the South American continent was moving away from Africa at the rate of 15 to 18 inches/year, or 4 million years for the separation. Satellite measurements in 1971-72, indicate an 11 in/yr movement, or approximately 6 million years for the separation.

Satellite measurements for 1975 show an 8 in/yr movement yielding a separation time of almost 9 million years. These data would indicate that the speed of the continental movement is decreasing. The current Global Positioning Satellite System (GPS) measurements are taken at a different location but do show an additional slowdown in the rate of movement. These data were not available to the authors of the early continental drift articles when the 465 million year date was suggested. Current research and studies on the continental movement are directed at modern affects on geophysics, volcanology and fault displacement, and are not challenging the original geometry or the time of the breakup of Pangaea because it has no bearing on their research. An extrapolation of the GPS data for South American data show that South America and Africa were joined between 87,000 and 2,000 years ago, the larger number being a linear extrapolation and the smaller a minimal exponential extrapolation. The extrapolation is based on insufficient data to be adamant about the time required for movement, but the methodology is the same as the extrapolation of the sea-floor spreading data used to arrive at the continental drift number. The whole point is none of the physical measurements provide sufficient data for an accurate extrapolation; however the new data from satellite measurements tend to show the continental drift started much later than 465 million years ago. Recent discussions with Dr. William A. Hess, former director of the National Ocean and Atmospheric Administration's GPS program, indicated that at present the GPS system has 24 satellites in orbit, providing GPS data for the entire world and several new more sophisticated satellites are to be launched this year.

The current use of the GPS by earth scientists is focused on areas of interest concerning major faults and volcanos. However, the receiving stations do provide information on continental drift and several countries including England, Japan, Peru, Brazil, and some African nations have installed or are installing receiving stations. Earth receiving stations see approximately 6 to 8 satellites at the same time. This translates into approximately 18 data points per satellite pass. Based on four satellite data signals for locating the receiving stations position, this produces a massive amount (approximately 100,000 data points per year per location) of actual locational data for analyzing the movement of the receiving station. These data will provide a much more accurate analyses of the continental movement by providing sufficient data for accurate extrapolations. The observation point of the satellite removes the problem of an earth bound reference point. The annual and five year averages over the next twenty years should indicate the extent of the slowing of the movement and provide the basis for an accurate extrapolation to the time of initial movement. The current physical data indicate thousands of years for the initial movement rather than 100's of millions of years since the breakup of Gottsland.

There is a distinct possibility the initial breakup of Gottsland could have occurred in the days of Peleg. The geologic dating presents the same problems, since most methods of atomic dating are questionable beyond 10,000 years, and are also dependent on the speed of light. The Geologist and Earth Scientist use the index fossils to decide the age of the strata and the Archeologist uses the strata to determine the age of the fossils. Whose definition does one use?

Newton's laws of motion apply in most familiar situations, but in the world of subatomic particles at high velocities or strong gravitational fields, some of the physical laws seem to break down.¹⁶⁷ Einstein and others have shown that objects cannot travel faster than the speed of light, which is 186,291 miles per second. According to Einstein's theory of relativity, if an object were to travel at the speed of light its mass would become infinite. Since it would take an infinite force to accelerate an infinite mass, it seems one should forget about anything traveling faster than the speed of light. But now scientists suggest that a particle called a tachyon (from the Greek for "swift") may travel faster than the speed of light and cannot be slowed down.¹⁶⁸ Some scientists believe that if tachyons could be detected and harnessed, they would help one to communicate anywhere in the universe instantaneously. ¹⁶⁹ So far the particle has not been found, but the new theoretical physics does account for this possibility. Einstein's theory deals with conditions in which gravitational forces are not present and elements are at a constant velocity, and this environment does not exist on the earth. Relativity refers to the idea that velocity of an object can be determined only relative to the observer. The speed of light then could be a function of time, because time can only be defined by measurement.¹⁷⁰ The two basic clocks by which time is measured are:

- 1) the dynamical time clock whose divisions are governed by the period the earth takes to make a complete orbit around the sun which is affected by gravitational pulls between the planets; and**
- 2) the electromagnetic or atomic clock which is governed by the electron's orbit around its nucleus.**

The evidence suggests that the clocks run at different rates. Studies have been made of the differences between these two times and their possible effects on our systems, ¹⁷¹ and the point of reference is apparently the key. In the dynamical clock the point of reference is inside the environment of the measurement and is thus subject to the forces inside the sphere of influence. In the atomic clock system the point of reference is external to the environment of the measurement and is not subject to internal forces. Essentially all of the scientific laws have a time or speed of light function within their mathematical treatment. They are time dependent and are subject to revision based on the relative time measurement and/or the point of reference. Among the items which change as a function of CDK (the speed of light decay) are the atomic time intervals, Planck's constant, the Rydberg constant, the gyromagnetic ratio, and the rate of radio active decay; all of which would imply that atomic processes would slow down as a result of CDK (the speed of light decay). The fact that atomic processes are slowing would also indicate that the specific heats, viscosity and diffusivity coefficients which are proportional to $1/c$, as well as some reaction rates as governed by chemical kinetics would be altered. The CDK also affects the rates for osmotic and diffusion transfers. Thus the very processes which

we use to determine the age of geologic strata and the mechanism for determining the formation of the geologic ages have themselves been undergoing changes as the speed of light has decreased since creation. An example of this was demonstrated in the studies on the "Genesis Rock" returned from the moon. The gamma ray count suggested that the rock may be 4 billion years old, thus the name Genesis. However, when we fractured the rock [172](#) we found the particles shown in **Figures 99 through 102**. The individual fragments of the rock could not have been formed at the same time and the age measurements were not valid, since the counting value assumes a decay from the time the rock was formed. This is why NASA dropped the idea of using the lunar samples as an age criterion in measurements. Many of the methods used to measure age are in question when used to interpret ages of more than 10,000 years. This information has led many scientists to "rethink" the definition of geologic ages based on these "time" measurements. Also, many live specimens of the "index fossils" have been found in recent years.

Twenty years ago earth scientists believed that it took millions of years for oil to form and they also believed that all such oil formation and basins originated from organic material deposits. However, we can now make a good grade of crude oil in an afternoon in the laboratory from both organic and inorganic material. Scientists are using these methods to recycle garbage and trash, but at this time it is not economically feasible for commercial application, but may soon be due to environmental considerations. NASA is studying similar methods for extracting both water and fuel from carbonaceous rocks on the lunar surface to support moon stations and interplanetary flights. It would be economically feasible on the lunar surface due to the high cost of transporting sufficient supplies to the moon. They have also developed similar techniques to make industrial grade diamonds. Science at one time considered the process would take eons of time. Many precious stones, ie, rubies, emeralds, and sapphires are being made by these methods. They are so perfect in physical properties vis-a-vis natural gems that the government passed laws requiring that the manmade gems be sold as "artificial" gems. Scientific "fact" is constantly being altered due to new data and discoveries.

In 1900 the German physicist Max Planck proposed that light, heat, and other forms of radiation come in tiny bundles, which he called **quanta**. The amount of energy in a single particle depended on the frequency and can be given by the following equation: $E = h\nu$, where ν is the frequency of the wave and h is a constant that came to be called Planck's constant. Eventually scientists came to think of that single bundle of energy as a particle called a **photon**. The problem with the photon is that it exhibits both corpuscular and wave properties which are in direct conflict with the definitions of theoretical physics. Another problem stems from the fact that the frequency ν is defined as $\nu = c/\lambda$, where λ is the wavelength and c is the speed of light. Einstein's theory indicates that $E = mc^2$, where the energy is proportional to the mass and the speed of light. This equates energy, mass, frequency, and wavelength as proportional to the speed of light. If the speed of light changes, the relationship between these would be affected.

Exponential Function

Many of the scientific formulas also contain an exponential function that usually has time or the speed of light as a component. Radioactive decay is a good example of this exponential decay function. The half-life is measured in terms of exponential decreases over time, **Figure 92**. Science indicates that Uranium will decay to lead over a period of time and this decay curve is an exponential time function.

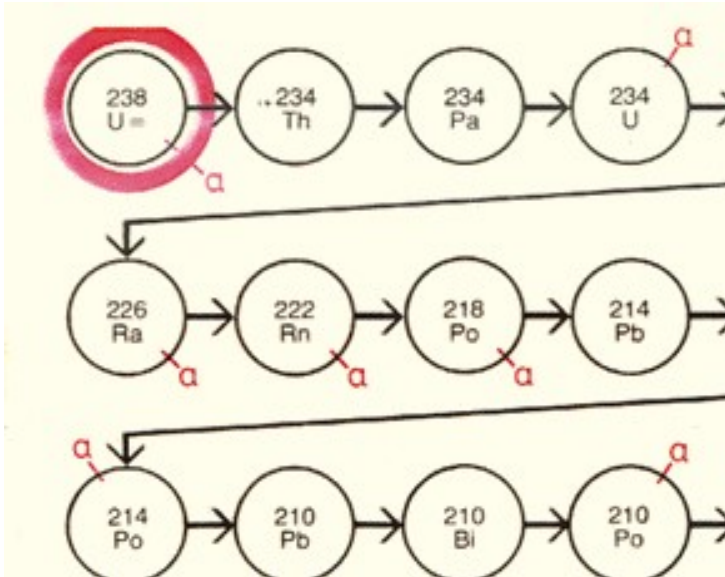


Figure 92 Uranium Radioactive Decay

The change in lifetimes of the Patriarchs in Genesis 10 from Noah to Joseph, reflects an exponential decay curve, **see Figure 3, page 9**. The aging of an individual and his decrease in vigor over time resembles an exponential death curve. The decay curve of the earth's magnetic field is exponential, **Figure 93**, and the extrapolation of the data indicates the earth would have been a magnetic star from 10,000 to 20,000 years ago. The population growth of unrestrained cultures follows an exponential curve, be they bacteria or human. The speed of growth of vegetation in the spring is a modified exponential curve if environmental conditions are satisfactory.

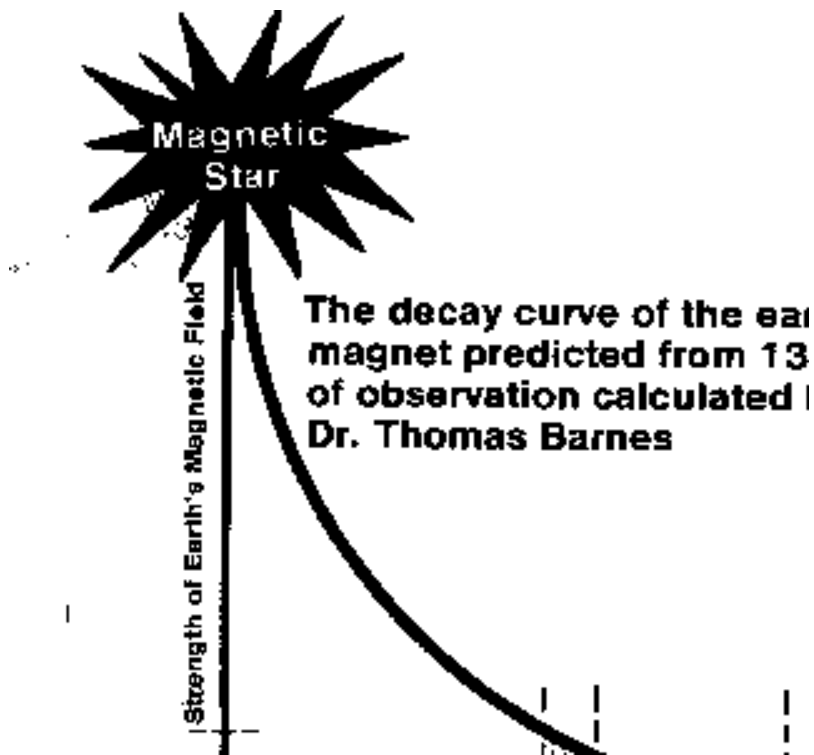


Figure 93 Decay of the Earth's Magnetic Field

The First Law of Thermodynamics states that energy can neither be created nor destroyed, but can be transformed. The Second Law states that Entropy or the measure of disorder, must always increase. This law says in effect that the earth is dying since the Energy of the universe is always decreasing and the Entropy (energy which is no longer available) is increasing. If all things are decreasing, then why would the speed of light be exempted? The aging of an individual and his decrease in vigor over time resembles an exponential death curve. The population growth of unrestrained cultures follows an exponential curve, be they bacteria or human. The speed of growth of vegetation in the spring is a modified exponential curve if environmental conditions are satisfactory. The First Law of Thermodynamics states that energy can neither be created nor destroyed, but can be transformed. The Second Law states that Entropy or the measure of disorder, must always increase. This law says in effect that the earth is dying since the Energy of the universe is always decreasing and the Entropy (energy which is no longer available) is increasing. If all things are decreasing, then why would the speed of light be exempted?

CDK - Speed of Light Decay

It has been proposed by Setterfield [173](#) that the speed of light may not have always been constant. That light travels at a constant speed, 186,000 miles per second, is one of the things that troubles most scientists about the Creation Theory. This presents a problem to them if the earth is only a few thousand years old as creationists claim, rather than millions of years old as science accepts. The problem stems from the idea that God created everything whole. But, if the speed of light is constant, then the stars one sees

now would have to have existed millions and millions of years ago, or when God created the stars, he would also have created the light from these stars on a path toward earth. That would mean that one observes light from a star that did not exist when the light was created. God could not create anything imperfect, and all things must follow His physical laws. The only way this is plausible, while retaining the physical laws and God's integrity, is to postulate that the speed of light is decaying, is slowing down. This would be totally consistent with the other things discussed, the decay of the earth's magnetic field, the radioactive decay, and the decay of the human body.

The speed of light has been successfully and accurately measured since the mid- 1600's. These data and the literature references shown in **TABLE I** are fully discussed in reports by Setterfield; "The Atomic Constants and Dynamical Time," and "The Velocity of Light and the Age of the Universe, CDK Model Summary for Critically Damped Curve." [174](#)

TABLE I
VALUES OF C units Km/Sec

Experimenter	Year	Value	Error + or -	Method
Roemer	1675	301,300	200	Optical
Bradley	1728	301,000	200	Optical
Cortnu	1871	300,400	200	Optical
Cortnu-Helmert	1874.8	299,900	200	Optical
Michelson	1879.6	299,910	50	Optical
Newcomb	1882.7	299,860	30	Optical
Michelson	1882.8	299,853	60	Optical
Michelson	1885	299,940	60	Optical
Perrolin	1902.4	299,901	84	Optical
Perrolin	1902.8	299,895	84	Optical
Perrolin	1906	299,880	80	Optical
Michelson	1924	299,802	30	Optical
Michelson	1926.5	299,796	4	Optical
Mittelstaed	1928	299,778	10	Optical
Pease-Pearson	1932.5	299,774	11	Optical
Pease-Pearson	1933	299,774	2	Optical
Anderson	1937.4	299,771	12	Optical
Huttel	1940	299,768	10	Optical
Essen	1947	299,797	3	Cavity Resonators
Bergstrand	1949	299,796	2	Geodimeter
Essen	1950	299,792	3	Cavity Resonators
Hansen	1951	299,789	1	Cavity Resonators

Bergstrand	1951	299,793.1	2.5	Geodimeter
Kraus	1953	299,800	3	Radio
Florman	1954	299,795.1	3.1	Radio Interferometer
Scholdstrom	1955	299,792.4	0.4	Geodimeter
Wadley	1956	299,792.9	2	Tellurometer
Edge	1956	299,792.4	0.11	Geodimeter
Wadley	1957	299,792.6	1 2	Tellurometer
Froome	1958	299,792.4	0.1	Radio Interferometer
Corson&Lorrain	1962	299,790	2	Radio
ITT Staff	1970	299,793	1	Radio
Bay, Luther	1972	299,792.5	0.018	Radio
Bay, Luther	1976	299,792.5	0.02	Radio

These data represent numerous measurements of the speed of light or a variable directly proportional to the speed of light. Barry Setterfield has compiled a complete monograph on these experiments, and the scientific communities' reaction and arguments for and against the idea.

One of the best illustrations for the CDK (speed of light decay) that one can present without going into all the technical details is the experimental error involved in these measurements. If one is measuring a specific value for a constant, the experimental technique will have a range of error. For example, if the value is 100 and the experimental technique has a three percent error, then the measured values would range from 103 to 97 and would scatter between these values. If one applies this error range to the measurement for c , the speed of light, and plots them as a function of the year measured, the results are shown in **Figure 94**.

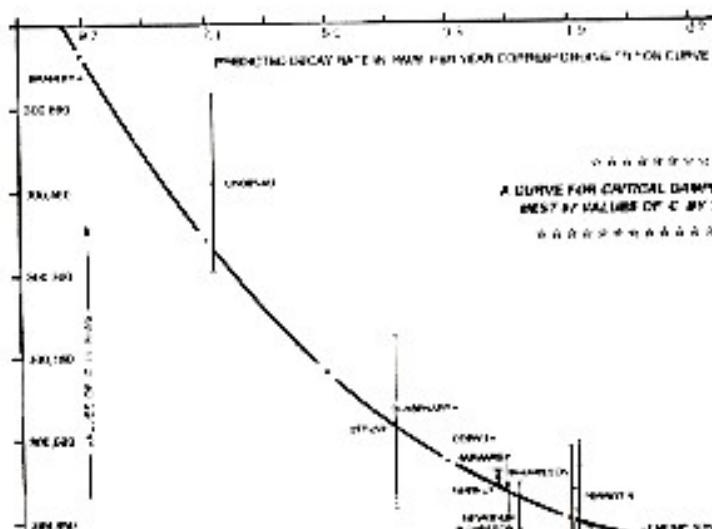


Figure 94 Measured Speed of Light as a Function of the Year Measured and Showing Experimental Error

This curve is very similar to that published by Setterfield. The figure does show, even considering the experimental error, that the value for the speed of light apparently has decreased over time.

If one mathematically fits a curve to these data, he will find an exponential decay curve as shown in **Figure 95**.

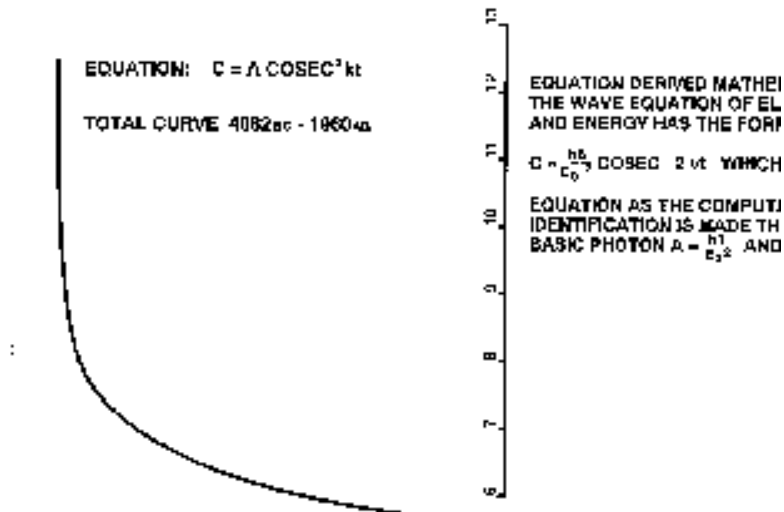


Figure 95 Computer Generated Decay Curve

Major adjustments in the equation would vary the vertical portion of the curve only by a few thousand years. This is consistent with the creationist's view of the subject, but certainly does not justify the millions of years required by the evolutionists. When one applies the measured speed of light data, **Table I**, to the computer generated curve where $c = A \text{Cosec}^2 kt$, **Figure 96** is obtained, indicating the data do follow an exponential decay curve.

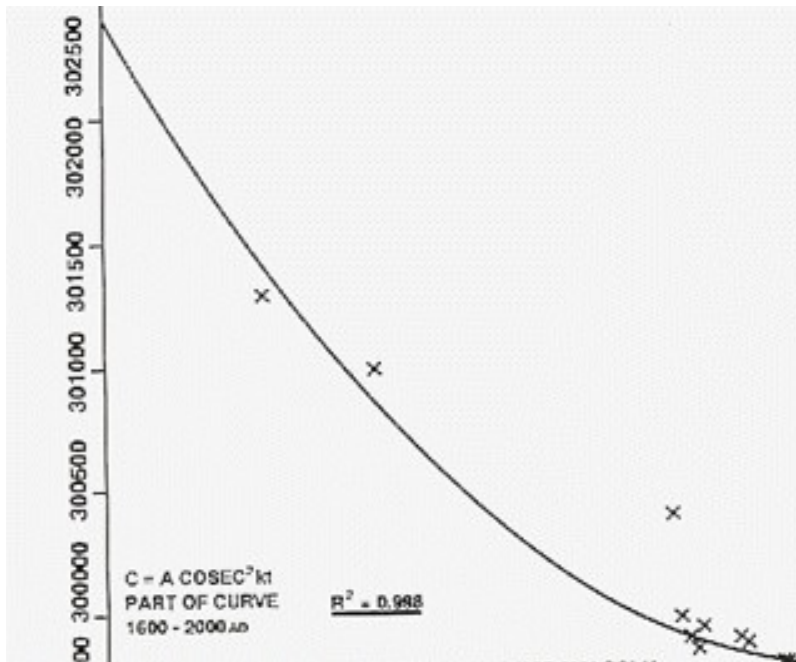


Figure 96 Speed of Light Measurements

If one was to describe an exponential curve with only words one would say: **It is a curve that has a very high value for the Y axis at a small value for X and the Y value decreases very rapidly with a small increase in X. Also the curve has a high value of X for a low value of Y and X rapidly decreases with small increases in Y.**

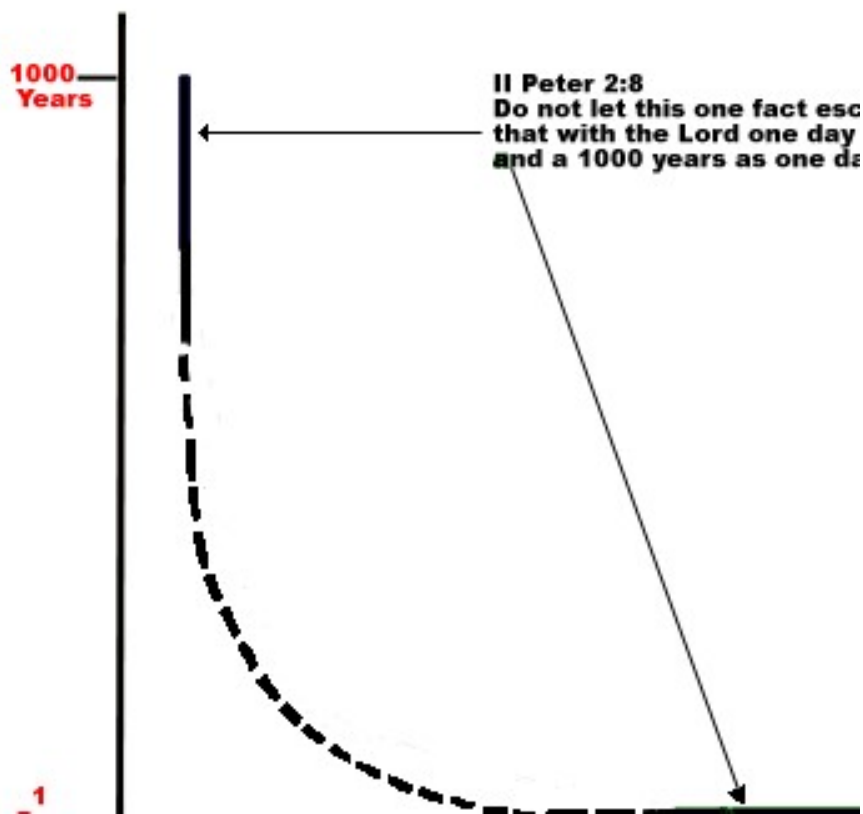


Figure 97 Graphical Representation of II Peter 3:8

Is this what Peter was describing in II Peter 3:8 when he stated: "Do not let this one fact escape your notice, that with the Lord, one day is as a thousand years and a thousand years as one day." This is graphically demonstrated by **Figure 97**. The curve would be in keeping with the effects of CDK and could explain the verse in II Peter and the time function that has bothered many scholars, and give additional insight into the reference to "the Day of the Lord."

Biological Consequences of CDK

The biological consequences of a higher c also fits with what science has observed. A higher c would create a greater photon density thus increasing the formation of chlorophyll, greater energy availability, and more rapid plant growth resulting in rain forests. An increase in diffusion would permit better delivery over longer lengths through the microscopic air tubes in the insects external skeleton thus enabling insects to grow much larger when c is higher. Viscous drag would be lower and laminar flow more easily maintained at higher c . This means that flying creatures would be more efficient and therefore could have much larger bodies, i.e., the pterosaurs.

Movements and stability of fish in water would be enhanced at higher c thus permitting heavy armor plated reptiles the agility of modern sea life. As c decayed, these forms of life would find it much harder to compete with the lighter, faster species.

Lower viscosities at higher c would enhance blood flow, energy transfers within the body and easier breathing, thus placing less strain on hearts and vital organs enabling them to sustain life in large animals. As c decayed, the effectiveness of these organs would be reduced. Higher heat dissipations at higher c would tend to favor reptilian creatures, thus giving rise to large reptiles. As c decreased, the central heated mammals would become more stable and would survive better. Thus the conclusion concerning the biological effects of CDK is that it is making living systems less efficient.

Acceptance/Rejection of CDK

The problem with such a suggestion as the idea that the speed of light followed an exponential decay curve, CDK, is the elephant chain syndrome. [175](#) The acceptance of an idea that is in direct contrast to what one has been taught is very difficult unless the evidence for the new idea is overwhelming, and even then some reject the change. Sir Harold Jeffery [176](#) continued his lifelong rejection of the Continental Drift on grounds that his estimates of the properties of the earth's mantle indicated the impossibility of plate movements. He did not accept the mounting geophysical and geologic arguments that were in favor of a mobile outer shell of the earth.

In the early 1920s when Wegener first made public his idea of the Continental Drift, it was reluctantly accepted by the scientific community as a possibility, but by the 1930s it had been generally rejected. However, in the 1960s it was again acceptable when massive evidence was accumulated for his proposal. The development of sonar mapping and the ability to study the earth's magnetic field led the scientific community to realize Wegener was correct in his original proposal on Continental Drift. The final proof of the theory came with the satellite measurements of the drift.

The physical sciences accept the "**universal gas constant,**" R , for the proportionality constant between pressure, volume, and temperature for an ideal gas in the equation $PV=RT$, for one mole. However, in engineering circles the gas constant is a function of the molecular weight. This produces a "**universal gas constant**" that is different for each substance. The gas constant is actually a function of the mass and the molecular weight of the substance, where the mass, m , divided by the molecular weight, M , equals the number of moles, n , $m/M = n$. This illustrates that a universal constant in science is a function of its accepted definition.

The speed of light could be written as a universal constant as $c = cse^{-kt}$, where c is the speed of light, cs is the transitional speed of light and e^{-kt} is the exponential function in time, t . The expression e^{-kt} , where k is a proportionality constant, is contained in a great many mathematical expressions of scientific laws, principles and theories.

The final chapter is yet to be written on the decay of the speed of light, CDK.

Age of the Earth

If the speed of light has changed, then the scientific explanation of the age of the earth needs to be revised and the geological ages may have been condensed into the relative

short period of time as indicated in the Bible. The onset of the Continental Drift could have been in the days of Peleg.

The geological supposition that the earth is millions of years old has some very troublesome conflicts with other scientific information. For example, if the earth's magnetic field is decaying exponentially as indicated by physics, [177](#) **Figure 93**, the earth would have been a magnetic star between 7,000 and 14,000 years ago. These figures allow for experimental error and error in extrapolation from the 130 years of available data. The decay of uranium to lead also presents a problem for the geological ages. If one takes the amount of Lead that is present in the United States today and extrapolates this amount to uranium that would be present in the past, **Figure 92**, one finds that the earth would have been so radioactively hot 25,000 years ago, that biological life could not have existed.

Atomic dating is based on these same decay curves, and it is assumed that the decay rate is constant. When the Lunar Samples were returned from the Apollo missions, NASA claimed that the Genesis rock, **Figure 98**, was four billion years old, based on radiation counts.

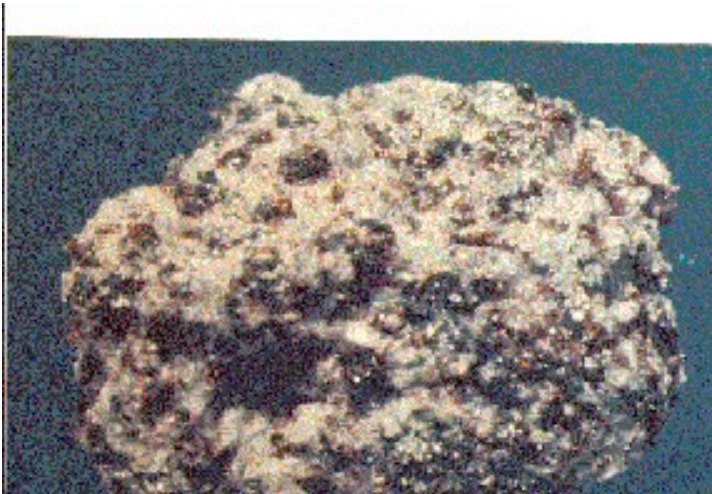


Figure 98 Genesis Rock from Apollo 11

A portion of this rock was examined by Birkebak, Cremers and Dawson [178](#) during their lunar sample studies, and the age of the rock was questioned. The Genesis rock contained spherical glass particles such as shown in **Figure 99**,

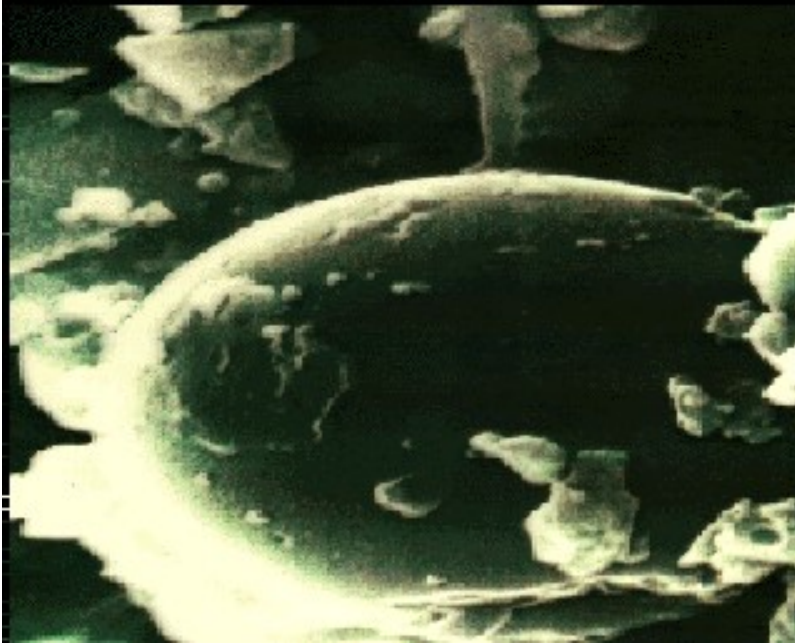


Figure 99 Glass Sphere from Genesis Rock

glass dumbbell shaped particles, **Figure 100**,



Figure 100 Glass Dumbbell from Genesis Rock

and glass cubical crystal shaped particles, **Figure 101.**

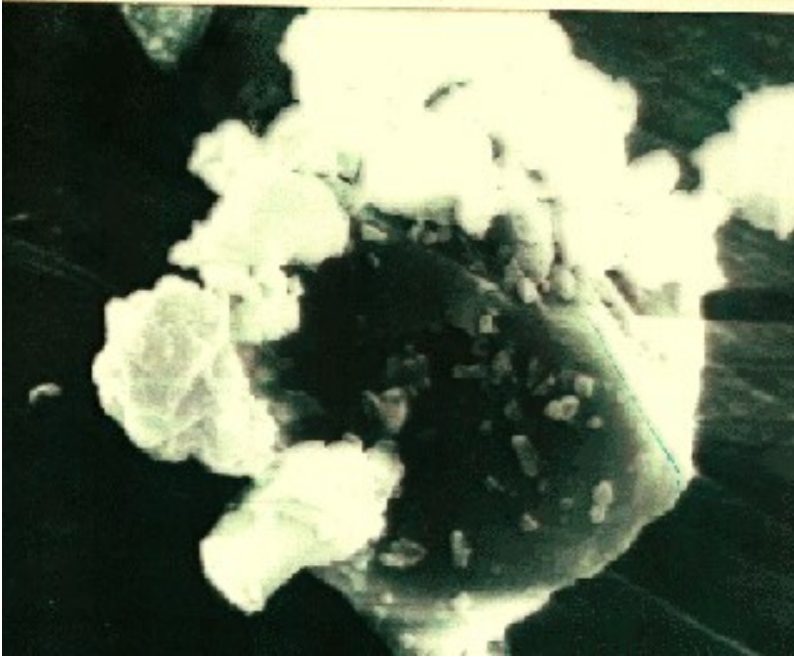


Figure 101 Glass Cube from Genesis Rock

The problem is that to form the spherical particles would require a relative fast cooling of the molten glass without mixing. To form the dumbbell shaped particles would require the same fast cooling, but would require that two small spheres collide and combine before they completely cooled. **Figure 100** also indicates that the dumbbell was hit by some object before it completely cooled as evidenced by the small indentation on the top sphere. In contrast, the glass cube of **Figure 101** would require very slow, controlled cooling for the crystalline structure to form. **But all three glass particles were present in the interior of the Genesis rock.** This would be impossible if all of the rock were formed at one time. Then what portion of the rock was being counted, and how was it formed? NASA dropped the idea of the Genesis rock because the gamma counts were obviously in question. In many instances the atomic methods of determining age are subject to errors.

If CDK is employed, none of the atomic methods of dating indicate a time more than 75,000 years. The age of the earth has been estimated at values of four billion to six thousand years and values in between. Each estimate is based on published data and has its own advocates.

Source of Wisdom

The book of Job illustrates the need for wisdom and the need to know the difference between knowledge and wisdom. Job's friends in their argument with Job were trying to convince Job of the reason God was letting him suffer. In their discussions the friends displayed knowledge, but not wisdom, and they failed miserably to comfort Job. They displayed a knowledge of God, but they lacked the wisdom of how to use and apply that knowledge. Job in contrast to his friends, did not know why he suffered, but he was sure of his righteousness and of God's being. Job understood that God was the source of all

wisdom, even though he sometimes doubted it. Job said that man could devise all manner of things to make his life better. He could seek out and mine precious metals and minerals from beneath the surface. Man could build cities, raise food, and harness the resources of the earth, but man could not control his own tongue. Man lacked the wisdom to understand the forces of nature but he was proud of his knowledge of how to use these forces. One sees this in man today. He has decided that he controls all things through his knowledge of science. Modern man is making the same mistakes that Job's friends made. They have the knowledge but lack wisdom. Modern man continually confuses information with knowledge and knowledge with wisdom. Science, for the most part, has rejected the idea of miracles and has used this as a knowledgeable reason to reject the Bible. If one takes into consideration that science cannot explain or define its own laws, then where is wisdom?

If one actually lists the things that men of science do not understand, it is surprising how little man really understands. Take electricity, for example. **Electricity** is defined as the flow of electrons, but that is not a satisfactory definition since one cannot define an electron except in terms of electricity or charged particles. The definition for lightning is the uncontrolled dissipation of electrical energy, but energy is defined mathematically in terms of time and the speed of light and this results in a cyclic definition. One can describe how energy or electricity behaves under controlled conditions; one can control it, use it and even pipe it around - but cannot define it.

One can make all sorts of calculations of the effect of **magnetism** on charged particles, on electrical fields, etc., but one cannot define it. One can calculate the attraction between objects and particularly metals. One can "**magnetize**" iron, but cannot "magnetize" aluminum. However, if an alloy of aluminum and 3% of iron is compounded, it can be made into a "super magnet" but the exact mechanism for the change is not known. One cannot produce an exact definition or define the basic principle for magnetism. There is even magnetism between people. Why does one pick a particular spouse? Why do some people repel others? It is animal magnetism or charisma that exists. One knows when it exists, both in terms of animate and inanimate objects, but it isn't quantitatively defined.

Gravity is another force that science cannot define. One can only oppose it with a greater force in the opposite direction. The effect of gravity can be demonstrated, measured, and mathematically treated as an attractive force or as a constant of acceleration, but science cannot define it.

One cannot define the methodology of **molecular changes**, but one can demonstrate it and through experimentation predict percentage yields. If one takes the hydrogen atom from the top carbon atom of a molecule of egg white and moves it to the third carbon atom in the chain we make an atom of rattlesnake venom. Why? We don't know. Chemists can put together all kinds of compounds, using various chemicals. In most cases, they will know how these chemicals will react under a given set of circumstances, but these reactions will all be based on probability. If one has ten items and mixes them with ten other items, ten new items are not necessarily formed. One may get eight of one kind and two of another. In fact, one doesn't really understand the processes that occur

when we combine various kinds of chemicals, atoms, or molecules. One can see how they react and can use this knowledge, but one cannot define these reactions in terms of absolute percentages of the resulting reactants or products.

What makes something **alive**? One can look into a person's eye and see love, hate, serenity, fear, joy, sadness, the emotional byproducts of life, but one cannot define what one sees. [179](#) What is this "spark" that makes something alive? One cannot define it, but one can certainly tell when it is missing. Scientists do not understand what causes life to exist or not exist; only the presence or absence can be detected, but it is undefinable.

Science defines **light** as the movement of energy in corpuscular form (photons) and in a wave motion. But this definition is a direct contradiction to science's own laws that something cannot exist in two forms and dimensions at the same time. It is a complete anomaly. Light moves through the atmosphere or space like a radio wave, so one can say that it possesses a wave motion. It also behaves as though it were composed of corpuscles or solid particles, like atoms. These small, distinct particles, as was mentioned earlier, are photons; but what, exactly, are they?

Among all of the above processes, the only consistent definitive observation that one can make is that they all contain some sort of **energy** . . . some sort of capacity to do work and this capacity or energy is a function of the **speed of light** and **time**. Many scientists reject the idea of physical miracles because it is believed that all physical phenomena can be explained by scientific principles. But these same principles are not defined, as stated above. Science cannot define electricity, magnetism, gravity, molecular motion, life processes, light, time, or energy. There is nothing in creation that does not contain at least one of these undefined principles.

The Bible tells that when Christ was on earth He performed a series of miracles. These miracles were not just to entertain but were to demonstrate God's complete sovereignty over all things. The scientific principles that cannot be defined were controlled by Christ as follows:

Gravity: He walked on water, [180](#) in the process defying or controlling gravity. Not only that, but the Word of His mouth enabled Peter to walk on water. [181](#)

Magnetism: His Word alone is attracting millions to Him, even over a span of almost 2,000 years. It is a magnetism that changes men's lives. The heart of man is continually evil, [182](#) but when Christ enters, all changes; there is a new creation. [183](#)

Molecular motion: Jesus took water and turned it into wine. [184](#) He controlled the molecular motion and the molecular processes. He controlled the movement of the atoms.

Life processes: He told Lazarus to get up and come out of the tomb, [185](#) which Lazarus promptly did. He healed people of various infirmities. He controlled life processes. Christ is the resurrection.

Electricity: The Bible says that when He comes, it will be as lightning [186](#) flashing from the east to the west. He is the force that holds all things together, the "nuclear glue" of science. He is omnipresent and created all things. [187](#)

Light: The Bible says that Christ is the light of the world. [188](#) He is universally constant.

Time: He is the Alpha and Omega, the beginning and the end. [189](#) Before time He was [190](#) and there will be no end to His Kingdom. [191](#)

All the things that science cannot define, Christ has demonstrated full knowledge of and control over the laws that govern them. These are God's laws and this knowledge is Wisdom. We are further told that Christ is the source of all power and energy. [192](#) Christ is the one who holds all things together. He, not science, is the only one who has ever been able to utilize all of the mysterious energy forms we've discussed.

So science cannot define the above laws. Is there one thing on this earth that does not contain at least one of the above? Mankind has the knowledge to use the above principles, but does not seek the wisdom which applies to them. When one encounters a verse like, **"in the days of Peleg the earth was divided"** or **"a thousand years is as a day and a day like a thousand years,"** one should consider the source and accept it as definitive and ask the Lord how to apply it. Many do not take the Bible as the inerrant Word of God, but many do accept the authority of the Written Word, [193](#) and therefore claim it is inerrant. [194](#) The book of Genesis and particularly the chronology of the Patriarchs is considered by some to be in question, [195](#) but many also consider it complete and authoritative. [196](#)

Isaiah said in **Isaiah 29:14**: **"And the wisdom of their wise men shall perish, and the discernment of their discerning men shall be concealed."** **I Corinthians 1:19** repeats this thought:

For it is written, I will destroy the wisdom of the wise, and will bring to nothing the understanding of the prudent. Where is the wise? Where is the scholar? Where is the disputer of this world? Hath not God made foolish the wisdom of this world?

Final Conclusions

The Plate Tectonic Theory accepted many of the presuppositions of the Continental Drift Theory but rejected the idea of individual continents drifting. The Plate theory which was based on contemporary observations and data did not try to develop an explanation for the early movement of the continents. The Plate theory does give a good explanation of current events concerning the continental movement in terms of plates, but it cannot account for the reverse and circular movements in some parts of the world. The concept of mountain building from the Plate theory is inadequate except on the continental coastlines.

The initial continental arrangement as presented by Gottsland does meet all the physical requirements for the initial super continent and meets the criteria established by Genesis. The continental trail left in bedrock by the moving continents, as shown by sonar mapping, indicates that an arrangement similar to Gottsland reflects the physical data much better than the original proposed Pangaea and does not produce inconsistencies, such as the movement of India. The movement of the continents from Gottsland obeys the laws of physics, and the reverse action accounts for many of the anomalies

unaccounted for in the Continental Drift and Plate Tectonic theories. The Continental Drift Theory had the correct idea, but the presupposition as to the center of the earth was incorrect. The scientists of the 1930s did not have at their disposal the data that is now available, and they did not consider the Bible as a source of scientific wisdom, and therefore ignored **Genesis 1:9**.

The continental movement from Gottsland is consistent with the center being at or near Israel and the Scriptures indicate that God throughout history has taken His people to Zion.

These data also indicate that the Scriptures specified the basis for the Continental Drift 3500 years before man discovered the fact. The scientific literature indicates that the Continental Drift and Plate Tectonic theories have had an enormous impact on the earth sciences, but it was covered in the Bible in two verses that man has ignored all these years.

John Calvin [197](#) stated:

For as the aged, or those whose sight is defective, when any books however fair, is set before them, though they perceive that there is something written are scarcely able to make out two consecutive words, but, when aided by glasses, begin to read distinctly, so Scripture, gathering together the impressions of Deity, which, till then, lay confused in our minds, dissipates the darkness, and shows us the truth and the true God clearly.

and Gordon J Spykman [198](#) amplified Calvin's statement:

Given the reality of our radical fall into sin, there is only one noetic point of departure, the Bible . . . Scripture is the noetic key to right understanding of the ontic order of created reality. It is the indispensable pair of glasses (Calvin, Institutes, I, 6, 1) which we with our sin-blurred vision must now wear in order to discover the meaning of creation, history, Christ, religion, and all the rest.

Scientists and Bible scholars have said that the Bible is not a book of science, but when it speaks of scientific things it has not been shown to be wrong. Many scientists try to adjust their acceptance of the Bible to fit their scientific beliefs instead of adjusting their science to fit the Bible.

God said in **Genesis 1:9** that there was a single land mass and science now agrees. He said the earth was divided and science agrees, although the time frame for the separation is in question by science. The proposed CDK could bring this time frame of separation into alignment with God's time frame.

If these verses hold true, then what about the verses:

"In the beginning God created the heaven and the earth." **Genesis 1:1.**

"A thousand years is like a day, and a day like a thousand years." **II Peter 3:8.**

"And I looked, and, lo, a Lamb stood on the mount Zion, and with him a hundred forty and four thousand, . . ." Revelation 14:1.

". . . and they lived and reigned with Christ a thousand years." Revelation 20:4.

When the following Bible verses are taken as they were written:

And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear: and it was so. Genesis 1:9.

And unto Eber were born two sons: the name of one was Peleg; for in his days was the earth divided, Genesis 10:25.

And upon the people that are gathered out of the nations, which have gotten cattle and goods, that dwell in the midst of the land, Ezekiel 38:12.

and applied as the only presuppositions to the Continental Drift Theory, a new Theory can be developed. The new Theory, as presented in this paper, utilizes, explains and does not contradict the observed factual, physical and scientific data that are available concerning the continental movements. This Theory illustrates that even though the Bible is not a book of science, when the **Bible discusses scientific subjects it is always precise and definitive.**

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175 When one trains an elephant for circus or domestic use, the elephant must be conditioned to be tethered when not engaged in its primary purpose. This is accomplished by placing a small wire cable around the baby elephants rear leg and fastening it to a solid restraint such as a tree or solid iron stake. Sometimes a pronged wire or even a barbed wire is used. When the young elephant tries to move beyond the distance allowed by the wire, the chain cuts or at least produces pain in the elephant's leg. The elephant soon realizes the pain can be avoided if when it feels a tug or tightening of the chain he ceases moving in that direction. When the elephant is grown it is so conditioned that a small cable connected to a cinder block will keep him in a prescribed area. The elephant has the strength to move beyond his restraint but has been conditioned by training not to move further when he feels the tightening around his leg. Unfortunately this also applies to many professionals. They have been trained and conditioned to what is acceptable and correct in their profession and are hindered from trying and/or accepting something new. The fear of disagreement from their peers or even ridicule keeps them within what is perceived as acceptable bounds. The ones who step beyond these restraints have furthered and enhanced their profession [Return](#)

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179 Matthew 6:22 states that the eye is the window to the soul. [Return](#)

180 Matthew 14:25 And in the fourth watch of the night Jesus went unto them, walking on the sea. [KJV]

Mark 6:4 But Jesus, said unto them, A prophet is not without honour, but in his own country, and among his own kin, and in his own house.

John 6:19. So when they had rowed about five and twenty or thirty furlongs, they see Jesus walking on the

sea, and drawing nigh unto the ship: and they were afraid. [KJV] [Return](#)

181 Matthew 14:28-29. [KJV] And Peter answered him and said, Lord, if it be thou, bid me come unto thee on the water. And he said, Come. And when Peter was come down out of the ship, he walked on the water, to go to Jesus. [Return](#)

182 Genesis 6:5. And GOD saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually. [KJV] [Return](#)

183 II Corinthians 5:17. Therefore if any man be in Christ, he is a new creature: old things are passed away; behold, all things are become new. [KJV] [Return](#)

184 John 2:1. And the third day there was a marriage in Cana of Galilee; and the mother of Jesus was there: [KJV] [Return](#)

185 John 11:43. And when he thus had spoken, he cried with a loud voice, Lazarus, come forth. [KJV] [Return](#)

186 Matthew 24:27. But straightway Jesus spake unto them, saying, Be of good cheer; it is I; be not afraid. [KJV] [Return](#)

187 Ephesians 3:9. And to make all men see what is the fellowship of the mystery, which from the beginning of the world hath been hid in God, who created all things by Jesus Christ: [KJV] [Return](#)

188 John 8:12. Then spake Jesus again unto them, saying, I am the light of the world: he that followeth me shall not walk in darkness, but shall have the light of life. [KJV] [Return](#)

189 Revelation 1:1. The Revelation of Jesus Christ, which God gave unto him, to shew unto his servants things which must shortly come to pass; and he sent and signified it by his angel unto his servant John: [KJV] [Return](#)

190 I Peter 1:20. Who verily was foreordained before the foundation of the world, but was manifest in these last times for you, [KJV] [Return](#)

191 Luke 1:33. And he shall reign over the house of Jacob for ever; and of his kingdom there shall be no end. [KJV] [Return](#)

192 Matthew 28:1. In the end of the sabbath, as it began to dawn toward the first day of the week, came Mary Magdalene and the other Mary to see the sepulchre. [KJV] [Return](#)

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RESUME OF JAMES P. DAWSON



James P. Dawson, 1005 Pine Oak Drive, Edmond, Oklahoma, 73034

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BORN: October 18, 1932, Drummond, Oklahoma

EDUCATION:

Bachelor of Science, Chemistry and Mathematics, Southwestern Oklahoma State University, Weatherford, Oklahoma, 1955

Master of Science in Physical Chemistry, Oklahoma State University, 1959.

Advanced Studies in Radiation Physics, University of California, Riverside, California.

Diploma in Pastoral Ministries, Southern Baptist Seminary, 1976.

Master of Sacred Literature, Trinity Theological Seminary, Newburgh, Indiana, 1996.

Doctor of Philosophy, Theology, emphasis in Apologetics, Trinity Theological Seminary, Newburgh, Indiana, 1996.

SPECIAL AWARDS:

Distinguished Alumnus Award, Southwestern Oklahoma State University, 1978.

Mensa Member Four Sigma.

Achievement Award, Science and Applications Directorate, Manned Spacecraft Center, 1969.

Achievement Award, Apollo Science Team, NASA, 1970.

Achievement Award, Lunar Receiving Laboratory Program Office, NASA, 1969.

Achievement Award, Apollo Principal Investigator on Lunar Samples, NASA, 1969-1975.

HOBBIES AND RECREATIONAL ACTIVITIES:

Certified SCUBA diver.

Licensed Private airplane pilot, high performance fixed wing.

Over 100 hours in rotary wing, Jet Ranger.

Coast Guard licensed Captain for under 100 Ton vessels, Captains a 56 foot Trimaran in the Florida Keys, Caribbean and Bahamas.

Writing - Has published five books and published 87 technical articles.

Amateur Radio, WA5PHJ, since 1963.

EMPLOYMENT HISTORY:

April 1992 to January, 1997

Dr. Dawson in association with other investigators started Jayphil Investigations. The agency will continued the corporate and technical investigations, utilizing the technical and government background of Dr. Dawson and associates. The Agency is concentrating its primary efforts on locating missing children and missing persons.

August 1988 to date

Licensed by the State of Oklahoma as an Armed Private Investigator. Dr. Dawson has been working with several Investigative agencies from 1988 to date. The main activities are corporate internal investigations. These include highly technical areas and investigations relating to space and scientific research contracts and industrial espionage. Other activities have been in investigative interviews, background investigations and application of computer techniques to investigative practices of Skip Tracing and locating missing persons. These techniques have been applied to both criminal and civil cases. Dr. Dawson has also been involved in the investigation of occult practices and satanic ritual child abuse.

July 1986 to date

President of Aaron C Ministries. Aaron C Ministries conducts seminars and training sessions in prophecy and evangelical areas for local and foreign churches and associations. The ministry has developed a program for delivering Persian Bibles to believers in Iran and Turkey and is currently conducting Evangelical Training sessions in the Bahamas. Aaron C has started and is supporting 14 small churches in the Bahamas, Turks and in the southern Caribbean. Aaron C is currently establishing a Packet Radio system for Missionaries in the Caribbean, Central and South America. The missionaries are to be trained, licensed and provided equipment for the system. The current activity is centered in the southern Caribbean and will be expanded as resources and participants become available.

October 1982 to date

President of Jayphil Corporation, a subchapter S Oklahoma Corporation. Dr. Dawson is responsible for the development of new computer techniques for landsat analyses and the evaluation of geophysical measuring devices. Jayphil Corporation has developed a Radiometric (gamma radiation) survey system. The system is airborne in a Bell 206B Jet Ranger Helicopter and data acquisition, evaluation and system operation is computer controlled in real time with GPS positioning and integration. Dr. Dawson continues to consult with Houston Natural Gas and Global Data System on the operation and development of these systems established by joint venture between Jayphil Corporation and Zeteo Corporation. Jayphil also establishes computer analyses for specialized data bases in tracking events, analytical overlays and search and test scenarios. Jayphil has been employed by a federal agency to conduct internal investigations dealing with the use of government data bases.

October 1980 to November 1986

Executive Vice President of the Zeteo Corporation. Dr. Dawson was responsible for processing landsat data for oil land gas exploration studies and selection of sites for electrical surveys. The Electrical division was also under Dr. Dawson's management. This division conducted field studies and surveys by measuring the apparent resistivity, induced polarization and phase angle changes in the time and frequency domain by employing an in line dipole- dipole array technique, and in conducting airborne radio-metric geophysical surveys.. Zeteo was successful in 51 of 57 oil well ventures by employing these techniques and analyses.

June 1975 to October 1986

General Manager of the KOKF Radio Station in Oklahoma City. Dr. Dawson designed, constructed and managed the Radio Station. The KOKF was an Educational- Religious FM Station operating as a not for profit, non-commercial station. The music formatted station broadcast numerous courses in GED development, Christian living and general Bible study areas. Dr. Dawson conducted a live phone-in-talk show dealing with Biblical topics and current events in Prophecy.

July 1972 to July 1986

Executive Vice President and Chief Executive Officer for the Oklahoma Foundation for Research and Development Utilization, Inc. (OKF) a non-profit tax exempt computer research group. Dr. Dawson was the Administrative and Technical Manager of all of the OKF's Research and Development projects, which included:

1. Classifying and processing NASA Landsat satellite data to survey cropland areas, forestry areas, rangelands and to aid in monitoring and identifying eroded areas.
2. The Pollution Control and Health Departments used the OKF system to track trends in Oklahoma's rivers and streams through water quality monitoring stations. Inventories of solid waste and sanitary land fills have been entered into the system for tracking and planning pollution control activities for the State of Oklahoma.
3. Impact analyses of every water and sewer system in the United States serving a population of over 2000. These analyses included determination of approximate dates communities will outgrow their present systems and an estimation of cost to maintain adequate capacities.
4. Determined the nonpoint pollution sources. Every 40 acre tract in the State of Oklahoma (approximately 1,500,000) was defined in the computer as to its current land use, location, elevation, drainage basin and soil composition. Using these computer banks the OKF collected sedimentation samples in lakes and rivers, chemically analyzed them and determined the probable locations of their origin, upstream.

5. The OKF was the first entity to enter the entire Bible into computer for research and analyses. These data banks have been widely used by Bible study groups, seminaries and individuals.

October 1967 to September 1978

Dr. Dawson was a Co-Investigator on the Lunar Samples for the Apollo Science Team. Dr. Dawson was responsible for the design, fabrication and operation of the scientific equipment for measuring the reflectance, emissivity, thermal conductivity, spectral reflectance and thermal properties of the Lunar Samples.

January 1971 to July 1972

Dr. Dawson was a Special Assistant to the Governor of Oklahoma for Science and Community Affairs. He also was Administrator of the Governors Office of Community Affairs and Planning and was responsible for:

1. Operation of the State Planning Agency for Oklahoma, which prepares development plans for Transportation, Community Development, Comprehensive Health Services and Facilities, Industrial Development. These plans are both short and long range plans, keyed to State and Federal Budgets and based on an established Goals program developed by Dr. Dawson's Office. Dr. Dawson worked with State and Federal Legislators to establish operating requirements, time frames and budget requirements for these functions, evaluates the cost/benefit effectiveness and advises the Governor on related legislative actions.
2. Tracking federal funds and projects in the State of Oklahoma.

June 1969 to December 1971

President of the Scientific Specialties Corporation. Dr. Dawson served as Chief Executive Officer for SSC a small scientific research and consulting firm. Dr. Dawson acted as a special consultant to the Manned Spacecraft Centers Science and Applications Directorate for Management and Research Operations. He was also the Principle Investigator for Radiation Physics studies on the Lunar Samples. He provided management consulting services to Litton Industries; Space Science Laboratories; Brown and Root-Northrup; Service Technology Corporation; Mier Industries, IBM Research Laboratories and Martin-Muerrita Corporation.

January 1965 to August 1969

Chief of the Engineering and Operations, NASA Houston. Dr. Dawson served as Chief of the Engineering and Operations Branch of the Lunar and Earth Sciences Division at the Manned Spacecraft Center from 1965 to 1969. His primary duties included the establishment of the Lunar Receiving Laboratory as an operational facility. This task consisted of preliminary design of the facility establishing the scientific requirement and

implementing the design, fabrication, installation and operation of the scientific systems for the Biological, Physical Chemistry, Radiation Counting, Gas Analyses and Vacuum Laboratories. Dr. Dawson was also responsible for the establishment of staffing and managements requirements of the laboratory, initiating the service contract ad management plan and served as the Technical manager for the service contract. This included the technical and administrative supervision of 85 professionals and 141 technicians who support the Divisions technical programs and operated the Lunar Receiving Laboratory. In addition to the scientific areas above, Dr. Dawson was also responsible for flight control for all processes, design and fabrication, total productive and preventative maintenance programs, chemical quality control of all flow processes including affluent, administrative control over 8.9 million dollar budget and technical management for planning product requirements, lunar sample handling and analyses and implementation of sample distribution plan. Also, Dr. Dawson was heavily involved in the Management of the Research and Development and service contracts for the Lunar Receiving Laboratory equipment systems developed by other Principle Investigators at Universities and Industrial Research Laboratories.

July 1962 to January 1965

Chief of the Radiation Physics Section at the Aerospace Environmental Facility, Arnold Air Force Station. The research programs consisted of surface physics studies, effects of radiation on the physical and optical properties of various surfaces and developing special equipment for measuring the radiation effects, i.e., vacuum integrating spheres and thermal environmental testing equipment.

PUBLICATIONS:

TECHNICAL PUBLICATIONS:

"Apollo 15 and 16", "Directional Spectral Reflectance" Lunar Science IV, 75-77, Lunar Science Institute, 1973.

"Solar Albedo and Spectral Reflectance for Apollo 15 and 16 Lunar Fines", Proceedings of the 4th Lunar Science Conference, Geochim, Coschism, Acta. Supplement 2, 3 MIT Press, 1973

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"The Pressure-Volume-Temperature Properties of Fluorobenzene" Journal of the American Chemical Society, 80, 2031, 1958.

SPECIAL NON-CLASSIFIED REPORTS PUBLISHED

"Vacuum Integrating Sphere for In-Situ Reflectance Measurements at 77 Degrees K from 0.015 to 10 microns." AEDC-TR-67-10 January 1967.

"Deviations from Integrating Sphere Theory Caused by Centrally Located Samples." AEDC-TR-65-271 January 1966.

"Intensity and Uniformity Monitor for Solar Simulators," AEDC-TR-66-81, June 1966.

"Hemispherical Reflectance of Metal Surfaces as a Function of Wavelength and Surface Roughness", AEDC-TR-75-170, 1965

"Vacuum Integrating Spheres fro Spectral Reflectance Measurements on Cryodeposits from 0.3 to 15 microns." AEDC-TR-65-178, October 1967.

"Thermal Radiative Properties of Carbon Dioxide Crydeposits in the 0.5 to 1.1 Micron Range", AEDC-TR-65-94, August 1965.

"Considerations in Cryopumping Measurements", AEDC-TR-65-68 1965.

"Evaluation of Mark I Space Chamber Cryopanel Coatings", AEDC-TR-64-85, 1964.

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Technical Report.

GEOLOGY, DINOSAURS, CHAOS - WHAT REALLY HAPPENED TO THE EARTH?

Huge fossilized bones, vast beds of extinct animal remains, reservoirs of fossilised fuel, massive coal deposits. Where did all these come from? What is the answer to the history of this planet? Does the Bible have anything to say on the matter? If not, then it is strange indeed that God would create a whole new creation over the remains of a previous creation and say nothing about it. Have the geologists, paleontologists and others provided ANY evidence to refute the existence of a Creator God? Or are they all deluded? The truth of the geological history of the world will shock you! The Bible reveals all!

By Neville V. Stevens

CHAPTER ONE

Lies, distortions and fabrications abound regarding the geological history of the earth. Because of outrageous claims on both sides of the debate, the real truth has become the first casualty. Arrogant men have inflated their egos with preposterous theories that cannot be substantiated in any way. And they have paid an enormous price! The true geological history of the earth paves the way for the discovery of untold mineral and energy wealth. This knowledge has been hidden from the understanding of humanity because of their own stupidity!

Across the landscape of the earth is a vast array of distinct lifeforms of intricate design and variety. There is seemingly no end to the complexity and variety of all these plants and animals. It's not difficult for a creationist to view this great wonder and believe in a Creator.

But those who dig into the rocks and sediments of the earth, are finding fossilized remains that don't seem to fit the structure of this present creation. More and more remains are being discovered that *appear* to threaten the history of the Bible. Since the Bible is claimed to be the divine word of God, it's a worrying time for those who cling to the idea of a divine creation; the weight of evidence *seems* to be against them.

Some devout creationists steadfastly hold to the Noahian flood to explain the distinct differences between the fossils being found today and the lifeforms that currently exist. They want to believe that these dinosaurs existed prior to the flood and became extinct as a result of it. To them it seems to be a logical explanation. Unfortunately, the over-simplification that this idea presents is very evident from the actual fossil beds themselves. Many of the dinosaur beds show evidence of heat distortion, and there is a distinct absence of human remains in the dinosaurian fossil beds; this clearly shows that dinosaurs and man did not contemporarily co-habit the earth!

Then we have the evidence of mountain-building processes. At some time in earth's history mountains have been formed. Mountain ranges around the world show evidence of lateral thrusting and over-thrusting. Some mountain alignments display the evidence of lateral tearing, where whole blocks have been over-thrust and vertically stacked. Some creationists try to explain this by saying that the mountains have always existed, and the Noahian flood merely deposited sediments - and fossils - between them, thereby presenting us with a viable fossil emplacement. Close scrutiny of this idea shows that it has no substance. It may sound plausible but the actual field evidence totally refutes it.

Then we have the evidence of continental movement. Even the complete novice can view the individual chunks of continental mass on a map and see that they all fit together. In support of this, it has now been found that certain geo-structural alignments on separated landmasses actually match each other. This type of evidence cannot be refuted. The evidence is so strong that theories had to be proposed to explain how and why the continental masses have moved. The established belief is uniformitarianism, which proposes that every action of the natural earth is a long and ever-changing process conditioned by the erosion of the elements; it was necessary to provide a mechanism that could be compatible with this widely accepted concept.

The first theory to arrive on the theorists drawing board was continental drift. The idea was to accept that continents were some kind of 'floating' entity that could 'drift' from one area of the globe to another. Many had proposed the idea of continental 'drift', even as early as the beginning of the 20th century. Generally, their ideas were rejected and they were ridiculed. It wasn't until the evidence of structural alignments of rock facies proved that the continents once fitted together that serious consideration was given once more to this idea. The sixties and seventies became the halcyon years for the theorists. Suddenly they were aware that global geology was vastly different from anything they had previously imagined. Everyone scrambled to find a mechanism that would effect movement of continental mass. Obviously, the tight, unyielding theory of uniformitarianism could not provide the answer, since this theory depended on the natural elements - wind, waves, etc. Equally though, this well-entrenched theory could not be ignored. It could still be supported with clever manipulation of the facts. In support of it, their '*stable*' datum became gradual change over eons of time by a mechanism yet to be proposed.

This idea seemed reasonable to all concerned. The most important issue was to avoid the use of the word '*catastrophe*'. The use of this word can turn normally sane theorists into

foaming, raving madmen. It could be compared to a child tormenting the animals at the zoo. Instead of prodding them with a stick, only the word '*catastrophe*' need be mentioned. Instant results! They are *so* sensitive to criticism of their own rationalism!

It's a shame their diminutive minds can become so inflamed by a word that typifies all that we can observe in our own solar system. The evidence of our sister planets is that they have suffered massive impacting from outer space. Our own moon is pock-marked over its entire surface with craters which have obviously resulted from missiles from space. Only a madman would suggest that the earth, which is a much larger target than our moon, has never suffered the same sort of impacting. Other planets examined by space probes have shown the same pock-marking. Also, we now have a recorded sequence recently captured by NASA, of the impacting of Jupiter by meteorites. To suggest that the earth has never suffered impact on the same scale of the moon and other planets is illusionary!

But, say these blind theorists, the earth has never suffered any form of catastrophe! So headstrong are they in their determination to prop up their own foolish theories that they have totally ignored the tremendous weight of evidence all around them. In addition to that, because catastrophism is so untenable to them, they have never examined the consequences of a major impact from space to gauge its effects on this earth.

The evidence of the fossil record shows that dinosaurs did exist in pre-Adamic times. This evidence exhibits a clear division of two separate creations. The reptilian world suddenly ceased to exist - was wiped out! What emerged after this event was a whole new range of species - the mammalian world. Most paleontologists concede this. They are unable to find any bridge from one to the other. They are entirely separate. It's generally conceded that a mass extinction occurred. Rather than admit that this extinction was sudden, they propose a '*rapid*' extinction '*in geological terms*' that they believe occurred over a period of ten million years. Hardly a *rapid* extinction!

Others, who take the more practical line of examining the fossil record logically, have concluded that something caused this extinction suddenly and violently. Some have even proposed meteorite impactation. These types of theories are not well-received by those who hold the line of uniformitarianism.

The one thing that all of these theorists must admit is that the world of the dinosaurs no longer exists. There was no transition - it was total and complete extinction. It is past and buried, and only the fossil record is still evident today.

So what did happen? For those who hold to the inspiration of the Bible as the Word of God, they could expect that God would *not* be silent on such events. There would surely be some mention of such awesome extinctions that wiped out whole species globally! It would be insensitive of God to allow the evidence of these things to remain, yet record nothing to explain it.

THE NOAHIAN FLOOD

Most biblical scholars have glossed over the contents of the Bible and narrowed their focus to one event - the Noahian flood. They use this flood to steadfastly maintain that it was the cause of all that we observe in the fossil record. How wrong they are! And because they are so steadfast in their assertions, they place themselves in a vulnerable position of being unable to explain so many obvious flaws in their beliefs.

The Noahian flood did occur, just as the Bible says. Furthermore, it did cause global extinction and the fossil record provides ample evidence of this! This is conceded by all but the most logically inept of the theorists. Compared to the previous extinction of the reptilian world however, the Noahian flood was a minor event. But the Noahian extinction demonstrates God's willingness to point the way to the previous and greater event of the reptilian extinction. It provides pointers and markers to the reasons why the first extinction occurred. Not only does the Bible record this event in graphic terms, it also provides us with details of a similar event that is yet to occur! Yes, there is yet to be another global extinction! And the Bible records this event in graphic detail!

Unless we understand what has happened to the earth we will never understand what the Bible is telling us. The Almighty God has made it possible to discover all these things if we seek our knowledge from the Bible and the principles that it contains. One of those eternal principles is '*seek and you will find*.' The problem with humanity is they don't truly seek to understand! They develop certain fixations based on human reasoning, and these become their unassailable position. Even more baffling is the stance adopted by those who claim to believe the Bible. They make flowery declarations about what they think the Bible says, and this from a repertoire of a handful of verses. The rest of the Bible they ignore! It's to the 99% of the Bible that they ignore, that the '*seek and you will find*' instruction is aimed.

The Bible details many things that have never been understood. In fact, the Bible reveals all that has happened to this earth, and what is more, it reveals what will happen in the future! Forget all your preconceived ideas and prepare yourselves for the shock of your lives! Nothing you have ever been taught, and nothing you have ever understood is true! The whole world is deceived on the issue of the earth's geological history, and because they have chosen to disregard the Great Creator the whole world is about to have their noses rubbed in it - not in words but *actual* events! After reading this article you will know what to expect! Those who choose to reject it will, nevertheless, find themselves in the middle of the greatest geological upheaval imaginable! And it will happen in your lifetime!

Let's now consider some of the known properties of this globular sphere we call earth.

THE PROPERTIES OF THE EARTH

Seismic detection units, located all around the earth, are used to monitor earthquakes and nuclear explosions continually. Using a system of triangulation from data collected from other sites they are able to pinpoint the location of such events. In other words the system works. When these events occur they are also able to measure the speed of the detectable

P & S waves that pass through the earth. Seismic waves increase speed in dense rocks and decrease in speed in rocks of lesser density.

What these observations have shown is that the crustal rocks are of a lower density than the mantle rocks, and also that the mantle rocks increase in density with depth clear through to the innermost zone, commonly called the 'D' zone; a distance of some 2,000 miles from the surface. From this zone to the very center of the earth, the 'S' waves will not penetrate because of lack of density. These waves will only travel through substance - even water will transmit these waves as it does in offshore seismic exploration. But it is clear that no mass can be detected beyond this 2,000-mile limit.

At depths below the crust of the earth at the boundary of the mantle, temperatures are so high that the rocks would melt, but the earth's gravity, acting on the overlying rocks prevents it. If gravity were temporarily interrupted, these rocks would instantly boil, and become a great sea of magma. The continents suspended above it, in zero gravity conditions, would no longer be stable but would be influenced by any force acting upon them. A sudden change in polar alignment, for instance, would cause the inertia of the earth's rotation to apply lateral force and slide them on the slippery, molten mantle.

This would, of course, require a suspension or at least a temporary interruption of gravity. Is this possible? Let's consider a few possibilities.

THE EVIDENCE OF THE ATOM

Many years ago, theorists were considering a means to split the atom. Their hope was that by peeling away the particles would lead to destabilization causing the atom to react with an enormous energy release. This sudden energy release would trigger a further reaction in adjacent atoms and so on leading to a chain reaction. They finally managed to do this and the first atomic bomb was detonated in the Alamogordo Desert in New Mexico. What they had done was to destabilize the nucleus of the atom forcing it to release its energy.

Today this process is quite common in linear accelerators. Through a huge circular tunnel, with a circumference of many miles, they accelerate particles to near light speed using a linear magnetic process. Once they have reached speed, particles are accelerated toward them from the opposite direction, colliding with great force. This process provides sufficient force to strip away sub-particles, destabilizing the individual atoms and forcing them to release all their energy, just like a mini-nuclear explosion. The collision causes a lot of noise and a tremendous amount of heat - out of all proportion to the size of the atoms. This process goes on every day in the U.S and Europe. Man's ingenuity when it comes to exploring *true* science is unlimited. These people are *true* scientists in that they are able to prove tangible results.

The same cannot be said for earth 'scientists', because nothing they ever propose can be proven. And because they choose to live in a world of ignorance, they rely on the gullibility of others to accept their pitiful theories.

Now there can be no doubt that many missiles from space have collided with all the planets and their satellites in the past. All of them observed to this date show these unmistakable signs.

The earth travels around the sun once every year at a speed of 111,000 kilometres per hour. Imagine hitting a stationary object at that speed. Or imagine an asteroid crossing our orbital path at the precise moment that the earth cannonballed its way around the sun. A sizable asteroid would cause horrific damage - even wipe out most of the lifeforms on earth. A real catastrophe! But now let's imagine that the asteroid enters our orbital path from the opposite direction and is travelling at the same speed as the earth - an impact speed of 222,000 kilometres per hour. Now we're really talking about energy release. Even a relatively small asteroid of 10 to 50 miles in diameter is going to do more than just erase life. That's 200 times the speed of sound.

An asteroid of this size and speed would release energies on impact that we could not begin to calculate. What would the effect be?

The impact alone of such an object impacting earth at that speed would, momentarily at least, slow the earth and cause everything on the impact side to tend to continue in a straight line. This would cause a reduction in the overlying pressure of the continental masses on its mantle bedding. This in turn would result in a meltdown. If the impact were to occur in the northern or southern hemispheres rather than at equatorial latitudes, there would be a shift in axis. The rotational speed of the earth at the equator is about 1,600 kilometres per hour. At the polar regions its virtually 0 kilometres per hour. A shift of the polar axis would transmit the higher equatorial speeds to the lower latitude speeds. The earth would go into a violent wobble. If the earth continued to turn right over, then inertial forces of changing ground surface speeds would hurl landmass in all directions.

This description is plausible and could happen. It makes a whole lot more sense than the prevailing theories do. But there is so much more to the complexity of the earth, and the above description is vastly oversimplified. Shortly, we will discover that the Bible says it *DID* happen!

In fact, **THE EARTH IS DESIGNED AFTER THE MODEL OF THE ATOM.** The same Creator designed both. The earth has a central core just like the nucleus of an atom. This is the gravity and heat generating mechanism that powers planet earth. This just happens to be the major sticking point of the theorists. They will not concede to a rotating central core. This would defeat all their crazy theories on how the earth was formed. You see they believe that the earth and all the other planets are the remnant leftovers of our sun. The *theory* is that when the sun condensed to form a ball of matter, some of the left-over material remained in orbit around it; this material, *they tell us*, managed to accrete to form globular balls of matter. In time they all became the familiar spherical shape, developed gravity, started rotating, and somehow, managed also to spin off enough material to create their individual lunar satellites. Because of this theory, which they hold so dear to their hearts, they cannot conceive of a planet having a spinning, energy-

generating power plant at its center, ***EVEN THOUGH TRILLIONS UPON TRILLIONS OF ATOMS THAT EXIST IN THE UNIVERSE DO!!***

If you can see the irony in this, the next level of proof of their stupidity is going to blow you away. This proof comes from the universe. It's called 1987a.

A PULSAR IS CREATED

It was first observed in 1987. This mysterious object appeared suddenly out of nowhere and was captured on film -- the first ever to be recorded while in progress. It was labeled supernova 1987a. The theorists claim that a supernova is a star in destruction. The observation of 1987a led to the development of a whole new theory. What they observed was a tiny ball of matter appearing suddenly and shining with great brilliance. This they said was the remnant of a star, which had collapsed onto itself, crushing individual atoms out of existence to form a proton/proton reaction. This tiny spinning orb, they claimed, was the remnant of all matter formerly contained in a star that had been crushed by the immense *force of gravity* (sic) of the star's nucleus. This tiny orb is supposed to be composed of pure protons which are the theoretical nucleus of an atom. Even knowing the incredible force needed to split the atom, they *theorize* that the **strongest force known**, the **matrix of the atom**, is split by **the weakest force - gravity!** The remnant of all these atoms - the nuclei, is then supposed to have accreted to form proton matter! Their stupidity defies the imagination!

As observations of Pulsar 1987a continued they noticed that this tiny orb was spinning many times per second and emitting a range of cosmic rays across the whole electromagnetic spectrum of wave lengths, and at very high frequencies. These emissions were from a pole to pole slit in this spherical mass and the frequencies were modulated by the frequency of its rotations. This led to the unmistakable conclusion that this giant slit was the aperture through which these rays were emitted. The implications of this discovery were staggering to astrophysicists. To this very day, no-one has been able to offer any feasible explanation for what is, ostensibly, a power plant of some form, that has appeared inexplicably out of nowhere.

Shortly after the discovery of the incredible light-emitting aperture, and true to form, a paper was released by a learned professor who said the pole to pole slit in this pulsar was the result of an earthquake. His paper is truly indicative of the type of insanity that is so widespread among the theorists who are totally void of any understanding at all!

A cursory glance of the photos of this supernova will show increasing volumes of matter forming in the vicinity of the pulsar rather than collapsing onto it. Astronomers and Astrophysicists love to speak of great destruction occurring out there in space. Whole galaxies are exploding they say! Every supernova is the destruction of yet another star. They describe their observations in terms of doom and gloom, and ponder the fate of the universe. How deceived they are! On the authority of God, no star has exploded - no galaxy has been destroyed. All that we see in space is still forming! How can we know this for sure? God tells us:

Isa 40:26 *'Lift your eyes and look to the heavens. Who created all these? He who brings out the starry host one by one, and calls them each by name. Because of His great power and mighty strength, **not one of them is missing.**'*

That's very plain! The Great Creator says **not one of them is missing!** God's creation is not falling apart in the universe! God takes note of everything in the universe: **Isa 45:12** *"It is I who made the earth and created man upon it. My own hands stretched out the heavens; I marshalled [arranged in order] their starry host."*

THE PROTOTYPE

The pulsar is the central power plant of stars and was designed by God **AND MODELED AFTER THE PROTOTYPE - THE ATOM!** Scientists cannot admit to this because it would demand a Master Designer and Creator. Scientists like the idea of randomness. They would love to imagine that every atom is different - just like the snowflakes. That certain randomness resulted in their existence. They would like to believe this is true of stars also. They are horrified that subsequent observations of pulsars since the appearance of 1987a have revealed total *lack* of randomness. They are all the result of precise architecture and all have the same properties!

Why is there so much opposition to a revolving, central core in planet earth? They freely admit that Supernova 1987a is a gravity-generating powerhouse, only a few miles in diameter, which they claim is drawing all matter towards it. It's size in relation to the star that they believed was degraded to form it, is miniscule. They also have to admit that the star that they believed was sacrificed to its creation was previously non-existent! The supernova appeared in an empty void! But these people never let the facts stand in the way of a 'good' theory!

As for the earth's core, they are quite happy to concede a static core made of iron or nickel or even gold as one theorist proposed. But they won't hear of an active gravity-generating-revolving core. They have now observed such things in atoms and stars but they become foaming maniacs at any suggestion of a similar mechanism in the earth. They refuse to admit to any form of logical, intelligent design. And in this they are willingly ignorant! It's not that they can't see it -- they won't see it!!

Since the key to understanding the dynamics of planet earth involves an understanding of its gravity-generating mechanism, we need to understand what other discoveries have been made that might clarify certain aspects of this mysterious force.

In the early 1990's, seismic researchers discovered deeply engraved ridges and hollows at the 'D' zone, the lower level of the earth's mantle; some 2,000 miles below ground level. These were discovered using powerful computers to generate images from very sophisticated seismic data. What they showed were channels encircling this inner surface, and huge rafts of matter which resembled continents forming a type of mirror image of surface continents. These were distinct formations and had definite mass. Between this zone and the very center of the earth, no matter can be detected. Any matter at all that has

density equal to water would be detected if it were there - but its not! Some theorists have claimed that there is matter there but it must be of a lower density than water and therefore undetectable. These latest seismic images show the distinct boundary of matter - and it terminates at the 'D' boundary. What's more, the outline of these huge chunks of matter (some of them the size of a small continent) shows definitively that some force has reacted with them to cause their distortion.

Naturally enough, theories abounded as to what they are and what they mean. One popular theory is that these are surface continents that have sunk through 2,000 miles of material twice as dense as crustal mass and settled at the 'D' zone. This theory was born in the hallways of the highest levels of this world's academia. Here's the quote from a science magazine carrying the article: *'Some researchers believe that the anti-continents are not only a parallel to the surface but might actually be made of the stuff from the surface - that is, sinking slabs of oceanic crust.some researchers take this as a sign that ancient pieces of oceanic crust may be falling to the core boundary and settling there, forming the anti-continents.'* (Earth Magazine, Aug 1995, Article: Anti-Matters).

It's no wonder God calls them fools!

This was, however, an important discovery even though their conclusions about what they were observing were in error. These distinct ridge and channel structures show that the surface is not orderly but appears to have undergone some form of stressing. And so they did! The force that binds the atom is the strongest known, whereas the force of gravity is the weakest. The gravity-generating mechanism of the earth doesn't require the same degree of force to interrupt it. Unlike the atom which maintains its intra-matrix bonding integrity and resists deformation, the earth is not so stable - it wobbles a little, its poles shift periodically, and it shudders and shakes with periodic earthquake activity. Apart from that, it's relatively stable as long as no external force is applied. But since, like the atom, and like the pulsar, its controlling mechanism is at its center, any force applied by way of impact is likely to cause severe instability because its controlling mechanism is only a relatively weak force and there is no anchoring mechanism to stop it from rolling over. This should present no problem for anyone since the same effect would result whether there was a central controlling mechanism or not!

We have another planet in our solar system that has rolled over. Uranus rotates at an angle of 90 degrees from the perpendicular. All the others rotate vertically to the plane of their orbit. Logically, we would have to conclude that some force has acted upon it to turn it from the same axis as all the other planets.

When you stop to consider the irregular mass at the 'D' zone of the lower mantle, you have to wonder what could have caused the raised sections and the channels between them. Some of the gouged out sections appear to be several miles deep. It's not the sort of workmanship that one would expect of the Great Creator. What it does indicate though, is that the central core of the earth has cannonballed into it, ripping and gouging out huge chunks of matter with its high-speed spinning action. As a matter of interest, the pulsar spins up to 50 times a second. The earth's core would have a similar configuration. An

object that size that spins that fast, whether a pulsar or the earth's core, must have enormous power. If the core came into contact with the 'D' zone, and the evidence of these strange forms suggests that it did, then almost anything could have resulted. Was this enough in itself to cause a major disruption to gravity. Or did the contact cause the spin of the earth's rotation to increase greatly causing enough centrifugal force to overcome gravity? The evidence is not yet complete enough to say *how* it happened, but we can prove that it *did* happen!!

The evidence is in the geological record of the earth. This evidence is so amazing **THAT IT REVEALS HOW AND WHY ALL THE PETROLEUM, COAL AND DIAMOND DEPOSITS WERE LAID DOWN** and where they can be discovered. Because 'science' has so foolishly ignored the evidence they cannot understand. Billions of dollars of shareholders funds are wasted on exploration for these resources based on foolish theories that cannot be proven.

Now you can know the truth!

THE MYSTERIOUS ATOM

Amazingly, the evidence of a central, gravity generating core is in all the matter of the universe! The atom is the perfect example. While the atom was once considered to be the smallest unit of mass, today it has proven to be a whole package of particles, all in rapid orbital motion around a nucleus, which has infinite energy reserves. If this tiny dynamo were to be disabled the mass of the whole atom would disappear from existence. This is because the mass of an atom is extremely rarified in relation to its volume. This nucleus holds it all together. If we were to magnify an atom to infinity and view it, we would see an amazing assortment of particles faithfully performing their orbital gyrations for ever without ever diminishing their energy reserves.

Scientists today ponder the notion of 'perpetual motion' and conclude that it's impossible; that without sufficient energy reserves it can't be done. Energy generation, as we know it, requires fuel of one type or another to burn - so they've concluded that perpetual motion is not possible. They long ago decided that the known laws of physics preclude any possibility of the infinite energy reserves needed to make perpetual motion a reality. It seems their laws of physics are incomplete, doesn't it? *BECAUSE IF DOES EXIST!* It's going on all the time - they simply lack the intelligence to see it. The tiny dynamo - the atom - continues to function for ever without any need for energy renewal! This is why God refers to them as fools - **Rom 1:22**. An observer stepping onto planet earth for the first time and observing their theories would probably call them *mindless ratbags* - but we need to be as generous as God and leave the tag as '*fools*.'

LINEAR ACCELERATORS

Now we know that every atom in the universe is made up of a very great number of particles. Linear accelerators in the U.S. and Europe have already identified hundreds of different particles in each atom. They are constantly discovering new ones as they collide

these atoms at high speed and strip away their component parts. This process generates enormous heat flashes as the energy is released; energy that is out of all proportion to the size of the colliding particles. They have demonstrated again and again the enormous complexity of the 'simple' atom. The atom will one day prove to be the most complex mechanism known.

An interesting book that details particle discovery through the use of particle accelerators is *'The God Particle'* by author Leon Lederman. Lederman confesses that his work provides more surprises than it does answers. It gives a very good idea of the nature of quantum mechanics.

So what about the earth? Considering the research already done on earth and the findings indicated by seismic investigation, why would the earth differ from the model of the atom out of which it's built? The earth and everything on it is built out of atoms. God is showing us the secrets of His creation.

Before examining some of the astounding revelations of the Bible, let's consider some of the other properties of this planet.

EARTH'S TEMPERATURE

It is known that the temperature of the earth increases with depth. The increment is around 1 deg F for every 100 feet of depth. Some of the deepest mines in the World are in South Africa. Some of these are at depths of 7,000 feet or more - 1½ vertical miles. So hot is the temperature in these mines that refrigeration is installed to cool them, to enable men to work in them.

The deeper you go in the earth, the hotter it gets. It would be logical to think that at depths of tens of thousands of feet the earth's sub-strata would be molten - a whole sea of lava boiling away like a cauldron. But it's not! This is where the proper application of the known laws of physics helps us to understand. While the temperatures are above the boiling point of the rocks, the overlying pressure of the rocks ensures they remain quiescent. This principle can be observed in a pressure cooker, where water is heated in a sealed container. As the heat expands the water, the pressure stops it from boiling. Because far greater temperatures are required to make it boil, the food cooks a lot quicker. The same principle can be observed in the cooling system of an automobile. Never lift the cap of the radiator while the engine is hot. Often the temperature is above boiling point, but because of the pressurized system it won't boil. If you were to suddenly lift the radiator cap the water would instantly boil.

So it is with the super-heated rocks at depth. Because of the overlying pressures, the rocks, even though at temperatures far beyond their normal boiling point, remain in a quiescent or solid state. **Gravity is what stops the earth from melt-down just a few tens of miles beneath the surface.** Any interruption of gravity or any destabilizing force acting upon the earth would have devastating effects!

CORE EFFECTS

The earth's core has many functions. It's gyroscopic action stabilizes the earth in much the same way as a spinning top is stabilized by its inertial forces. As the inertial forces diminish with slowing speed, the top destabilizes and wobbles, and eventually comes to rest. A top would sit idle forever unless some force is applied to it. It has no inherent energy resources of its own. This is not so of the earth! The earth enjoys the perpetual motion of the same type as the atoms of which it's composed and modelled. Like the atom, the earth can be destabilized by an external force acting on it. The big difference is that they are magnitudes apart in proportional forces. The atom has the strongest force known, whereas, gravity has the weakest. Proportionately, the atom requires forces magnitudes greater than the earth to destabilize it. But, like the atom, the earth can be destabilized.

The similarities don't end there! To destabilize the atom, an external force is applied that impacts it at high speed, stripping away its component parts creating an imbalance. Certain of its particles function as stabilizers. If they are disturbed then the atom becomes unstable. Even in simple terms we can understand the truth of this. Atoms are constantly being bombarded from the sun. These cosmic rays strip away electrons and replace them with others. This is evident in a tinted window pane. When the sun's rays hit the window pane they dislodge electrons causing a minor chain reaction. One electron collides with another until they pass through the glass. What emerges from the other side are electrons stripped from the tinted glass, hence the different colour of the light. This process greatly reduces the speed of light, but on emerging from the glass, it resumes its normal speed of 186,000 miles [300,000 km] per second. This shows us that even photons of light have inherent properties that are unexplainable by our present known laws of physics.

THE DYNAMO OF THE SUN

It should surprise no one that the earth also has amazing qualities that are observable and measurable. Throughout the universe there are many astral bodies that generate heat. Our own sun is an example. While no one to date has correctly identified the mechanism that generates this heat, it should have been obvious to all long ago, that the sun generates its heat and gravity from a central core. Technically speaking, even this is not truly correct, because the sun doesn't generate heat, per se, but radiation! This radiation excites the atoms and molecules that it strikes causing them to vibrate, just like a microwave oven; and it is this vibration that converts the radiation to heat. On earth, at equatorial latitudes, the sun is very hot. Yet there are places where you can walk a few miles and experience temperature changes from 40deg C to 0deg C. In equatorial Africa there are mountains that are covered with snow even in the height of summer.

The sun is hottest at sea level. The higher the altitude and the more rarified the air, the less heat that is generated, because there are less atoms per cubic centimeter to excite. The sun's rays pass through 93 million miles of barren space, through near vacuum conditions, yet when it hits our atmosphere we experience the heat that its rays generate. This is not unique to our sun alone! There are billions and trillions of other suns or stars

that function in exactly the same manner, and which have exactly the same radiation-generating capabilities.

Since the heat we experience from the sun has its origins as radiation that is transmitted as photons of light, we need only block this passage of light to prevent the generation of heat. Ordinary insulation performs this function. The surface of the earth does also. Just below ground level, where radiation cannot penetrate, the earth is cool. Underground dwellings are renowned for their constant temperatures.

As we go deeper into the earth however, temperatures begin to soar. In fact, within ten kilometers of the surface, the heat is too great to sustain life. This ten kilometers is a thin veneer in comparison to the total diameter of the earth of around 12,000 kilometers.

According to the prevailing theories of the earth, it's claimed that the earth is still undergoing a cooling process from the heat of its 'birth.' Of course, these fruitloop theorists never explain the origins of this heat in the rarified regions of space that would be at absolute zero (minus 273deg) in the absence of a heat-generating source. They not only *assume* the existence of heat but they also *assume* the existence of gravity without any generating mechanism. This remnant heat from the earth's 'birth', *as they claim*, is undiminished even though *their upper estimates* of the earth's age is now 15 billion years (that's 15,000 million years).

AND NOW THE TRUTH!

All theorists agree that there is some type of core within the earth that generates gravity. They just can't agree on what it is or how it works. They know that an electro-magnetic field is generated around the earth and they loosely link this with gravity. But gravity itself, as any type of wave form, is undetectable. All efforts to detect some type of gravity wave form or frequency emission have failed! And yet, gravity is a reality and is easily demonstrated. We no longer have to observe apples falling from trees as Isaac Newton did, in order to determine it to be a true entity. In trying to quantify the concept of gravity, they have merely **substituted a mysterious field for a mysterious force** acting at a distance. **AND NONE OF THEM KNOW WHAT THIS MYSTERIOUS FORCE IS!**

THE MYSTERY OF THE SUN

The concept of a static core explains nothing! From a logical point of view, the only thing that makes sense is for the earth to have a generating power-plant like the sun. Now there is no one on earth that would claim that the sun doesn't generate energy - because the energy it generates is obvious! The sun is a massive and violent generating power-plant magnitudes greater than our earth's generating capabilities. Although no scientist on earth has tumbled to the generating mechanism of the sun, it should be patently obvious to any reasonable thinker, that the sun has a pulsar at its center that emits microwaves to excite the gaseous cloud which envelopes it. The pulsar generates gravity as well as radiation emissions; the gravity holds its gas cloud in place, and the radiation super-heats it,

generating a boiling gaseous mantle. Almost the entire mass of the sun is in its tiny nucleus - just like the atom!

Of course, the diminutive mentality of the theorists, which is fueled by their determination to theorize a substitute for a Creator God, has led them to propose some of the most outrageous and senseless theories imaginable to explain the mechanism of the sun. The most prevalent theory is that the Sun is a giant ball of hydrogen which is on fire and burning away. **THEY NEVER EXPLAIN HOW THIS GREAT BONFIRE CONTINUES IN THE ABSENCE OF OXYGEN!** Another prominent theory is that the sun is a giant nuclear reactor. Considering that there are billions of stars like our sun in the universe, it would be fortuitous indeed if all of these developed as controlled nuclear reactors by chance! Nuclear physicists are aware of the need to set in place many fail-safe systems to control nuclear reactors. It's an exacting science to develop controlled nuclear power without causing an explosion or meltdown. The balance of heating and cooling is critical. But, say the theorists, the sun developed its nuclear power-generating ability - by sheer chance! What outrageous Neanderthals these people are!

We've already speculated on the effects of a high-speed projectile from space impacting the earth, and its effects. It could result in the earth being turned over from its vertical rotational aspect. The forces that would be applied as the equatorial speeds were transmitted to the slower polar regions would certainly cause catastrophic landslides. But this is only part of the story. Something destabilised the force of gravity. Since the earth, like all the stars in the sky and all the atoms that make up matter, are controlled by a central nucleus, we could conclude, even in the total absence of any visual evidence, that the earth is no different. **WHY WOULD IT BE ANY DIFFERENT FROM ALL OTHER SUBSTANCE IN THE UNIVERSE?** And since quantum physics has demonstrated again and again that every atom is a purpose-built, self-contained machine of enormous energy forces, we can conclude that the earth has a similar architectural design. The chief difference between atomic forces and gravity is that the former is exponentially greater than the latter.

The evidence in the geological record is that there has been a subterranean melt-down at some time in the past that has hurled the continental mass in all directions across the mantle of the earth. The original landmass has broken up - **ALL OBSERVERS CONCEDE THIS!** The evidence shows that the original continent broke into thousands of chunks and many were hurled together in high-speed collision, and like a concertina, the leading edges of these blocks thrust up mountain chains around the world. Super-heated rocks liquified and gushed to the surface in the great chasms that opened up - much of which was thrust up into the mountain ranges.

While human knowledge is limited when it comes to understanding macro mechanics in relation to the planets, we do know that magnetic lines of force are generated from the earth's core. We also know that gravity is something of the order of an *electro*-magnetic force even though we have no means of detecting it as a force. We know it has an electrical component because it reacts with the solar winds which only effect the polar regions. These solar winds drive particles deep into space creating the Aurora Borealis

and the Aurora Australis at the north and south poles respectively. The same effect is observed in the tail of a comet which always points away from the sun. The solar winds, which are really not winds at all, but a stream of charged particles, selectively bombards the polar regions, demonstrating some form of electrical interaction.

The evidence is clear that the forces that were interrupted which resulted in the subterranean meltdown emanated from the core of the earth. Contact of the outer core (or mantle mass) with the spinning core resulted in many different configurations of increasing and decreasing forces as the polar positions were driven to high speeds and equatorial regions were slowed as the earth reeled like a drunk. The vortex of force passed completely through the landmass hurling great sections apart and sliding them across the face of the earth. Great rafts of sediments cascaded over the landmasses bulldozing everything in their paths. Even though meltdown occurred in the mantle rocks, these, being of higher densities (SG=7.0+), the crustal rocks with an average density of 3.5, remained buoyant. Outpourings of mantle rocks rose to infill many of the great cracks that opened in the landmass blocks. Landsliding surface sediments also filled many of the great chasms. Virtually everything on the face of the earth was bulldozed into heaps and buried - animals, vegetation, and even the marine life in the oceans!

When the earth finally stabilized, all life had been erased, and great molten piles of rocks had been thrust up into mountain ranges that formed at the bow-wave of surging crustal sediments and overthrusting crustal blocks. Some of these great thrust zones stretch for thousands of miles. Often we find displaced blocks of mountain ranges that have been laterally thrust out of alignment with the rest of the thrust zone, clearly showing the lateral forces that they had undergone. Once the dynamics of what has occurred is understood, the geology of the earth can be read like a book. There is no great mystery. The evidence is very clear and observable throughout the earth.

COAL DEPOSITS

As the earth began to stabilize after the initial loss of gravity and the violent gyrations caused by contact with the spinning core, the leading edges of the moving continents ground to a halt, causing the rest to concertina huge sections into mountain ranges. Landslides continued to stack sediments miles high. Whole forests were buried and carbonized. All vegetation was either burnt up or buried. The landslides swept everything before them. The coal fields of the earth were laid down as trees and vegetation was carried along in great rolling landslides of superheated sediments. The vegetation was covered and carbonized, in the absence of oxygen and formed the coal fields in exactly the areas you would expect to find them.

The incredible part about this knowledge is, that once it is understood in what directions the forces were applied, and where the vortex of force passed over the original landmass, then the energy resources of the world can be clearly identified. The theorists claim that coal deposits were laid down in peat swamps. Their theory falls apart when they have to explain their equation for the carbonizing of cellulose in such an environment. The swamp theory also falls apart when they attempt to apply it to some of the coal fields

around the world. These are rarely found in locations that would have support a swamp environment! Also, a fire in a dried out swamp would produce ash NOT coal!

The lense-shape of many coal deposits show that they have been crushed under enormous pressures; pressures magnitudes greater than in a swamp environment! The fact that the coal deposits of the world are generally found in concentrated areas shows there was no random development in swamp environments over millions of years, as the theorists suggest, but the result of a single event capable of massive burial in a super-heated environment.

PETROLEUM FORMED

The theory commonly believed today on how petroleum was formed is even more outrageous! In fact, it's pathetic! **THIS IS WHAT THESE CRAZY THEORISTS BELIEVE:** *Petroleum was formed from the bodies of sea life that die and sink to the bottom of the ocean. Their bodies are covered with sediment and they begin to decay. In the decaying process tiny droplets of oil are released. These tiny droplets of oil eventually accumulate with other droplets to form a pool. Over millions of years this oil migrates to hundreds or even thousands of metres, and then becomes entrapped under a impervious caprock which prevents further migration.* This, they say, is the mechanism for the creation of oil reservoirs which often contain billions of barrels of oil! And always a mysteriously-appearing caprock ensures the entombment in an unexplained, fortuitous way – this they would have you believe!

FACTS THAT THEY CONVENIENTLY IGNORE: Oil floats on water. Any oil generated from a decaying body has a tendency to migrate upwards not downwards. There is no possibility that any oil would migrate downwards in a water-saturated environment. None whatever! It wouldn't happen with one dead fish let alone the trillions upon trillions needed to create a single commercial reservoir of petroleum. The oceans of the world have an effective predation system that rapidly consumes anything that dies. Even bones and shells are quickly ground up to form sediments by the constantly moving tides. The theorists concede that a caprock is necessary to ensure that the 'accumulated' oil doesn't migrate away. They understand that the natural tendency of oil is to float away in a watery environment, but still insist that for millions of years while a pool of oil is being generated, it continues to migrate downwards until it becomes entrapped.

Oil in a marine animals body represents only a tiny percentage of its total mass. Even allowing for all of this oil to accumulate, the total volume of animal life needed to produce a single petroleum reservoir would be hundred or even thousands of times the volume of the reservoir. Logic alone suggests that these volumes would need to accumulate within days and be sealed into a reservoir within days of their concentration. And this is true of every petroleum reservoir on earth! Even the land-based petroleum!

HOW WAS PETROLEUM FORMED?

It's obvious that petroleum doesn't form from gradual processes. Petroleum was formed globally, and at the same time by catastrophic forces capable of bulldozing marine life into heaps and burying them in a heated environment! Gradual accumulation is impossible!

All the marine life was concentrated at the leading edges of crustal blocks together with the marine sediments. These were rolled along in jumbled heaps by moving crustal mass. Much of the water was boiled off, generating **THE MASSIVE SALT DOMES** so often **ACCOMPANY PETROLEUM DEPOSITS**. Some of the present continents broke into many pieces causing massive rifts. Many of these were filled with flowing marine sediments or landslide material. River beds generally, are former crustal fractures. Every petroleum reservoir on earth was generated from the bow-wave effect of moving crustal blocks. There is no petroleum deposit on earth that was not formed in this way! Once this principle is understood, the identification of potential oil fields becomes childishly simple.

What a great shame that geologists have blinded themselves to the truth. Instead they have believed their own pathetic theories of gradual accumulation that, from virtually any location on earth, can be seen to be false once the truth is known. With the vast reserves of, as yet, undiscovered petroleum reservoirs around the world, the nations could have enjoyed a more balanced prosperity. How many wars would have been avoided if every nation had their own mineral and energy reserves, and knew how to locate them?

Instead, the House of Joseph (America and Britain predominantly) have foisted on the world their lunatic theories, which, in the case of petroleum, is supposed to be formed by microscopic droplets of oil from dead animals, that inexplicably sink to the ocean floor (even though oil has a lower density than water), is covered by sediments, and over millions of years, manages to work its way to a reservoir that conveniently has an imperious cap or seal to prevent seepage. **What a fairy tale!** What degenerate mind could possibly dream up such fantasy? Anyone with intellect above that of an ape should recognize the obvious flaws in such theories.

HOW DIAMONDS WERE FORMED

What about diamonds, how were they formed. Obviously, since diamonds are almost pure carbon, they must have had a carbon source. They also needed extreme pressures to crystallize.

Conventional 'wisdom' suggests that they were developed at depths of hundreds of miles in the earth where sufficient pressures and heat exist to form them. That seems a logical approach. The only problem is that they need to reach the surface if they are to be found - and many diamonds have been found. There is no known mechanism for them to migrate to the surface from these depths. Volcanoes that spew out molten lava from great depth, don't yield diamonds. And even if they did, the diamonds would graphitize with such temperatures during the long migration to the surface. Diamonds will turn to graphite at temperatures lower than magma.

The fact that so many diamonds have been found at different sites around the world makes it clear that they are the result of a definite mechanism, and one that was present with all the other necessary components and ingredients for the deposition of diamonds near the surface. A study of any diamond mine throughout the world will show that diamondiferous material extends just a few hundred metres below ground level. Beyond that the material is barren. Such evidence hardly suggests compatibility with prevailing theories.

The truth is that diamonds were formed just a few hundred metres from the surface in the jaws of colliding crustal blocks where volatile hydrocarbons floated and accumulated with other conglomerated sediments. The enormous pressures detonated the volatiles creating enormous heat. This heat and pressure remained until the pressure was released by the subsidence of the block facies. The built-up pressures were released firing them to the surface. Many diamond pipes have surface vents of molten rock, that looks as if it's been cut with an oxy-acetylene torch. The expanding gases rapidly cooled the deposit by carrying off the heat. Many diamonds do show partial graphitization though as a result of exposure to heat without pressure.

WHAT ABOUT GOLD?

It would seem reasonable to take the time to deal with some of the other minerals and precious metals. What about the noble metal - gold? Did God scatter this all over the world to make it hard to find? Was it always in minute quantities of a few grams per tonne?

The answer is no! In the original landmass, when the angels shouted for joy, God had created a beautiful world of intricate design. The pyramid shape of the earth was richly embellished. Minerals and precious metals formed a major part of the elaborate embossing of certain features. It was a work of art. No wonder the angels shouted for joy! The only indication of some of these features is the location of some of the major gold deposits. They were transported from their original location. With a little work, it would be quite feasible to find the original locations of all gold deposits. There is, however, no point in doing this. God is soon to restore it all anyway within the early part of the 21st century. In the interim period, gold will become so worthless it will be thrown into the streets (**Lam 4:1**).

THE NEXT GLOBAL CATASTROPHE

What the academic world has refused to believe **DID** happen, **is going to happen AGAIN!** Global upheavals will erase life from earth and only a few humans will be left. Most of those people alive today will see it in their own lifetimes! The same physical forces that destroyed the earth formerly, will again be enacted to restore the earth to its former glory. In the process, most animal life and vegetation will be destroyed. The cynics, who have refused to accept that catastrophic events have destroyed the earth in the past, will see with their own eyes the horror and devastation that now awaits them! The Almighty God is about to rub their noses in it! All their silly 'science' is going to be

flung in their faces! Since they have chosen to ignore logical evidence, their demented minds will be confronted with awesome events that are beyond their comprehension!

The Bible speaks of these colossal events in very graphic terms. The problem is, most Bible students have been indoctrinated by sanctimonious claptrap and have ignored the many warnings in the Bible of coming events - and the magnitude of these events! Such people speak of 'much love' but totally refute the **POWER** of God. Now here the truth of the Bible!

THE BIBLE REVEALS ALL!

Most people have believed that the first 4 books of the New Testament are the gospel of Christ and the only part of the Bible relevant today. Many totally ignore the rest of the Bible. They have reduced the Gospel to a message about the person of Christ. Yet the prophets of old preached the Gospel, which means 'good news' about a coming Kingdom which would be established on earth by God in the latter days (**Dan 2:44**). Before Jesus' ministry began, and before any of the books of the New Testament were written, John the Baptist was preaching about the coming Kingdom of God (**Matt 3:2**). Jesus Christ came as the representative of God and of that coming Kingdom.

John the Baptist came in the Spirit of Elijah, and was the advance emissary of the coming ruler, Jesus Christ. John was merely a fore-type of another that will appear on the scene in the latter days. And this latter day Elijah will come in the Spirit and power of Elijah. For those who believe that this latter day Elijah has already come and gone - you are in for a rude awakening! Christ said of John the Baptist, that *'among those born of women, there has not arisen anyone greater than John the Baptist.'* In other words of all those who have ever lived, none excelled him in obedience, righteousness and sense of purpose. And his sense of responsibility never wavered till the day he died. John was no reed shaken in the wind, he was a resolute, determined man who spoke the truth without fear or favour. Herod, himself admired the man, even though some of the things that John said were offensive to him (**Mark 6:20**).

John the Baptist was separate from the organized religious groups prominent in Jerusalem at that time. In fact, he, like Christ, found fault with mainstream religion. John did, however, have an organized group of disciples, who assisted and believed as he did. Until the start of his ministry, he lived in the desert, far away from all mainstream Judaism.

The Bible records that John the Baptist preached this good news of the coming Kingdom of God from the Old Testament (**Matt 3:1**). Now notice the message of John the Baptist: **Luke 3:3** *"And he came into all the country about Jordan, **preaching the baptism of repentance for the remission of sins**; as is written in the book of the words of Isaiah the prophet, saying, 'The voice of one crying in the wilderness, 'Prepare the way of the Lord, make his paths straight. **EVERY VALLEY SHALL BE FILLED, and EVERY MOUNTAIN AND HILL SHALL BE BROUGHT LOW; and the CROOKED SHALL BE MADE STRAIGHT, and the ROUGH WAYS SHALL BE MADE SMOOTH; and all flesh shall see the salvation of God.'***""

A quick reading of this verse seems innocuous enough. But read it again and notice that these words from **Isa 40:3-5** are *about* baptism of repentance for the remission of sins'. Yet John the Baptist speaks about **MOUNTAINS BEING LEVELLED and VALLEYS BEING FILLED, and the ROUGH WAYS BEING MADE SMOOTH**. The next three chapters of Isaiah also continue the theme of these verses and refer to the resculpturing of the whole earth - **OF THRESHING AND CRUSHING MOUNTAINS** and **REDUCING THE HILLS TO CHAFF (Isa 41:15)** of **RECLAIMING THE DESERTS**, of **CAUSING RIVERS TO FLOW ON BARREN HEIGHTS (V18)**, **Chapters 40-42 of Isaiah** speak of the coming Kingdom of God when the House of Israel will be a light to the Gentiles and the whole world (**Isa 42:6-7**).

This is the good news of the Kingdom of God that John the Baptist was delivering. This message in Isaiah culminates with the return of Christ as King of kings and Lord of lords: **Isa 42:13**- *'The LORD shall go forth as a mighty man, He shall stir up jealousy like a man of war, He shall cry, yes, roar; He shall prevail against His enemies. I have for a long time held my peace..... I will destroy and devour at once. I will MAKE WASTE MOUNTAINS AND HILLS, and DRY UP THE VEGETATION, and I will MAKE THE RIVERS ISLANDS, and I will DRY UP THE POOLS. And I will bring the blind by a way that they knew not; and I will lead them in paths that they have not known: I will make darkness light before them, AND CROOKED THINGS STRAIGHT.'*

What does it all mean? Are the mountains of the earth really going to be leveled and crushed? Is this really a part of the good news of the Kingdom of God? The Apostle Peter said that the works that are in the earth are **TO BE BURNT UP (2Peter 3:10)** and then went on to say that **ALL THESE THINGS ARE TO BE DISSOLVED (V11) in the Day of the Lord** (and the return of Christ - **V10**). In **V11-12**, he asked the question: **"SEEING THAT ALL THESE THINGS SHALL BE DISSOLVED, what manner of persons ought you to be in all holy conversation and godliness, looking for and hasting to the coming of the day of God, wherein the heavens being on fire shall be dissolved, AND THE ELEMENTS SHALL MELT WITH FERVENT HEAT?"**

Peter tells us that this is to occur in the Day of the Lord - at the time that Christ returns! Is everything on the earth going to be literally burnt up? Or is this 'spiritual' talk for false doctrines or something else equally obscure? Most people like to read right over these scriptures because they don't understand them. Was Peter telling us the truth in plain language? What other references can we go to, to check it out?

Turn to the book of **Isa 42**. In **V14**, God describes the return of the House of Israel from captivity: *"For a long time I have kept silent. I have been quiet and held myself back. But now, like a woman in childbirth, I cry out, I gasp and pant. I WILL LAY WASTE THE MOUNTAINS AND HILLS, and DRY UP THEIR VEGETATION. I will TURN RIVERS INTO ISLANDS and dry up the pools. I will lead the blind by ways they have not known, along familiar paths I will guide them; I will turn the darkness into light before them, and MAKE THE ROUGH PLACES SMOOTH. These are the things I will do, I will not forsake them."* Continuing in **Isa 43:2** *"When you pass through the waters, I will be with you; and when you pass through the rivers, they will not sweep over you."*

When you walk through the fire, you will not be burned; the flames will not set you ablaze."

This return from captivity occurs during the Day of the LORD (**IPet 3:10**). Rivers will be turned into land, lakes (pools) will disappear. They will travel on smooth ground because God is going to waste the mountains and the hills. Everything will be dissolved, including all the cities, cars and industrial complexes. The memory of all the former things will pass away. The elements of the earth will melt with fervent heat - yet God says His people will walk through the fire (just like Shadrach, Meshach and Abednego), and they will not be burnt! This is what Peter meant when he said, *"What manner of person should you be ..."* Those who still cling to their rebellious ways will be turned back by the heat: **Isa 42:17** *"But those who trust in idols, who say to their images, 'You are our gods' WILL BE TURNED BACK IN UTTER SHAME."*

God refers to the earth as His holy mountain in the book of Isaiah: **Isa 11:9** *"They shall not hurt nor destroy in all my holy mountain, for the earth shall be full of the knowledge of the LORD."*

And in Daniel, the stone that destroys all the kingdoms of the world becomes a great mountain and fills the earth: **Dan 2:35** *'Then was the iron, the clay, the brass, the silver, and the gold [of the great image] broken to pieces together; and became like the chaff of the threshing floors; and the wind carried them away, that no place was found for them; and the STONE that smote the image BECAME A GREAT MOUNTAIN, AND FILLED THE WHOLE EARTH.'*

That perfect-sculptured stone [Christ] will fill the whole earth. What does this mean? Does it mean that the world will be like this **STONE** in appearance?

There are two very important considerations here:

Firstly, this **STONE** strikes the image on the feet and then all of the image, including the brass, silver and gold, was smashed to pieces together and **AT THE SAME TIME**. This is a clear indication of **WHICH EMPIRES** are to exist in the final subduction of the world by Jesus Christ -- who represents the '**STONE**' that destroys them.

We know that anciently, all of these four kingdoms existed together. One by one they arose to achieve power consecutively. *All* of these kingdoms are to feature prominently in the endtime - our time! Be sure you understand this clearly. It is vital to the understanding of prophecy. In the past, these first three kingdoms were described as consecutive kingdoms in all the WCG literature with only the final part - the feet and ten toes, existing in our time. The other 3 kingdoms were considered to be past events that have nothing to do with our time.

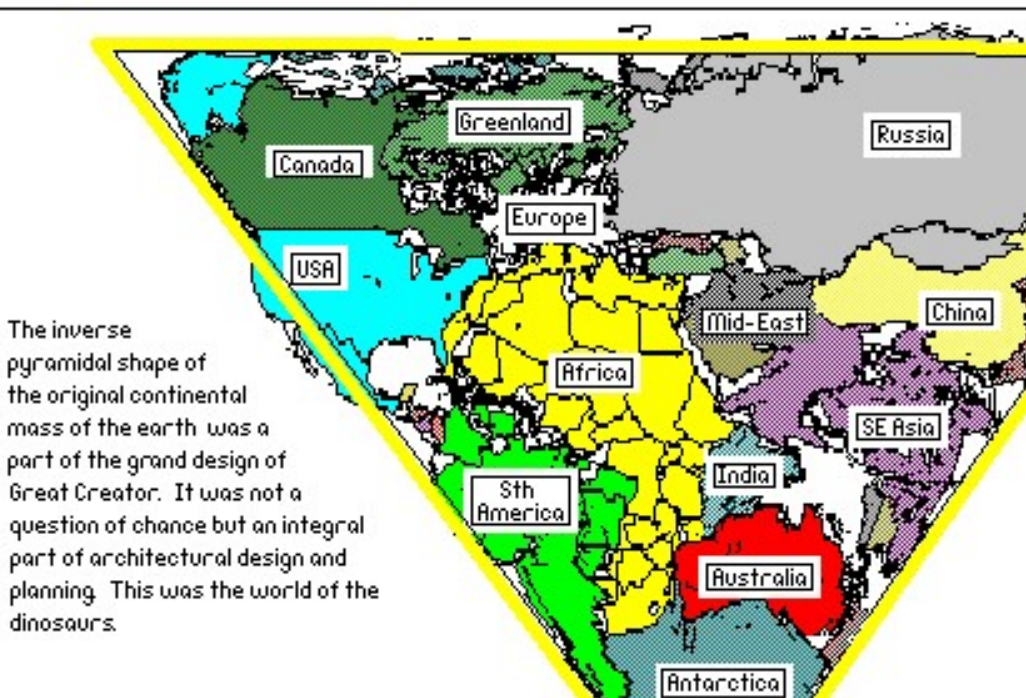
The Bible is very clear that **ALL WILL EXIST TOGETHER IN THE ENDTIME** as separate kingdoms, and **ALL WILL BE SMASHED TOGETHER BY CHRIST!**

Jesus Christ is the chief **CORNERSTONE**, that is the **UPPERMOST STONE ON A PYRAMIDAL SHAPE** - the *only* shape that has a **CHIEF CORNERSTONE**. The Church of God have long known this fact and also that the New Jerusalem city, that will descend from heaven is pyramidal in shape.

The second point is, as **Dan 2:35** tells us, this **CORNERSTONE [STONE]** will become a **MOUNTAIN** (Strong's Conc. from [6697] - implied meaning: sharp stone, compressed, with defined edges) and fill the whole earth. (Strong's Conc. [0772] taken from [0776], but meaning 'inferior')

Those who want to resist the truth of God can spiritualize this away by imagining that this refers to the spreading of God's word throughout the earth, yet the word used and translated '**MOUNTAIN**' is from the root word, that emphasizes the meaning of '**COMPRESSED AND DEFINED EDGES**.' God's word is surely not going to be 'compressed.' The Bible is referring to the **PYRAMID-SHAPED LANDMASS** or '**MOUNTAIN**'.

What does this mean?



It means, quite simply, that Christ is to replace our present inferior earth or **LANDMASS** with a better one. What now exists will be compressed to form **A SHARP-EDGED, WELL-DEFINED STRUCTURE**. And that shape is to be the shape of God's universal symbol of power - **THE PYRAMID**. The very word '**PYRAMID**' means '**FIRE IN THE MIST OR MIDDLE**.' Our God is a consuming fire! (**Heb 12:29**)

This new shape certainly will have 'fire in the middle.' God the Father and Jesus Christ the Lamb will be right in the middle of this great mountain or pyramid, at Jerusalem, and their brightness will illuminate the whole world: **Rev 21:23** "*The City (New Jerusalem) does not need the sun or the moon to shine on it, for the glory of **GOD** gives it **LIGHT**, and the **LAMB** is its **LAMP**. The nations will walk by its light.*" If the continents were scattered all around the physical globe, those on the other side wouldn't get much

illumination. But with Jerusalem once again at the centre of the compressed landmass - they most certainly will.

In days of old, it was said that all roads lead to Rome, but in the Millennium all roads will lead to Jerusalem from every part of the earth. The Bible tells us that Jerusalem is the center of the earth (**Eze 5:5, 38:12**. The New Bible Commentary Revised (p.669) renders **Eze 5:5** as '*Jerusalem is the center of the world.*') If you look at any map of the world today, this fact is not apparent.

No matter how you look at it, Jerusalem could not be construed to be the center of the world. But it once was! And this will become clear shortly!

So what is the Bible saying?

In the book of Job we learn that God laid the **FOUNDATION** of the earth (**Strongs 0776 - means landmass**). He marked off its dimensions, and stretched a measuring line on it - and He laid a cornerstone! Notice this scripture: **Job 38:4** '*Where were you (Job) when I laid the earth's **FOUNDATIONS**? Tell me, if you understand. **WHO MARKED OFF ITS DIMENSIONS**? Surely you know! Who **STRETCHED A MEASURING LINE** across it? **ON WHAT WERE ITS FOOTING SET**, or **WHO LAID THE CORNERSTONE**, while the morning stars sang together and **ALL THE ANGELS SHOUTED FOR JOY**?'*

This is speaking of the start of the first creation - the world of the dinosaurs – **when ALL THE ANGELS SHOUTED FOR JOY**. This landmass had a **CORNERSTONE** - a chief **CORNERSTONE** that **WAS LAID BY GOD HIMSELF**. This original landmass also had **ABSOLUTELY DEFINED AND STRAIGHT DIMENSIONS**! A map of the earth today reveals nothing in the current, fragmented landmasses of the earth that could be measured with a straight measuring line. Obviously, the landmass today is not the same as it was *when the angels shouted for joy*.

But there is yet more in the Book of Job that poses an even greater mystery. God says that the earth takes the shape of clay imprinted under a seal: **Job 38:14** '*The earth takes **SHAPE LIKE CLAY UNDER A SEAL**; its **FEATURES STAND OUT** like those of a **GARMENT**.*'

How remarkable this is! The original landmass had the distinctive features of a lump of clay imprinted under a seal - and as distinctive as those of a garment!. If you took a seal - such as the Great Seal of the United States of America - and pressed it onto a piece of clay you would see a definite imprint of great design. In the case of the Great Seal of the United States of America, it would leave a perfect imprint of a pyramid with the uppermost stone or chief cornerstone illuminated. Isn't it odd that this seal has an imprint of a pyramid on it's reverse side? And why is the uppermost stone illuminated? You could understand Egypt having the pyramid on their seal of office or on their currency, since the Great Pyramid of Cheops is in their country. But why the U.S?

Did God inspire this seal to be that of the greatest and most powerful nation in this endtime, and the greatest that has existed on the earth. Is it fortuitous that the United States of America just happens to be modern Ephraim, the ruler of the tribes of Israel? Is it also fortuitous that the Great Seal of the United States is the most well-known seal on earth.

Well the mystery becomes even more intriguing! Just what was the original shape of the landmass of the earth?

It was King David who preserved the key to this mystery. He also used the **Great Seal of the house of Israel** to ensure that this knowledge was preserved. Before examining David's legacy of the key of David, what evidence do we have that David knew what has happened to the original landmass of the earth? Here are some references:

Ps 18:15 *'The valleys of the sea were exposed and the foundations of the earth laid bare.'* What sort of event is this? What massive catastrophe could have exposed the deepest parts of the oceans? The very valleys of the oceans were exposed! It's difficult for the human mind to begin to comprehend such an event, but God says it happened! When the perfect vision of what exactly happened is clearly understood, you will realize the full extent of this great catastrophe that has occurred in the past!

In reading through **Psalms chapter 18**, you will notice that it seems to be speaking of King David. Most commentaries suggest that he is referring to his numerous battles with Saul and with the Philistines. If he were, then the description given here is an outrageous and presumptuous embellishment of his prowess as a military commander. God would never have allowed such exaggeration in His inspired Word; but neither would David, a man after God's own heart, countenance such outrageous misrepresentation of the facts. Although David's bravery and ability in battle was legendary, none of his battles even remotely paralleled the events described here. So what is the answer?

You will note that there are many quotations in the New Testament from the Book of Psalms. Most refer to Christ. But if you check back to the source of the quotation in the Book of Psalms, you will find that the description invariably refers to the writer, in most cases - David! To those who are unskilled in the knowledge of the Bible, this would appear to be misrepresentation. The Messiah Himself, quoted many of these *seemingly* 'out of context' verses. There are dozens of them in the N.T. Some examples are **Ps 16:10, Ps 22:1, 18 (Jo 19:24), Ps 69:4 (Jo 15:25), Ps 69:9 (Jo 2:17), Ps 41:9 (Jo 13:18), Ps 35:19 (Jo 15:25), Ps 34:20 (Jo 19:36)**. Christ says they referred to Himself! And so they did! The Book of Psalms, as with most of the prophets, are written in parable form. And just so there is no confusion over this, God states it plainly: **Ps 78:1** *"O people, hear My TEACHING; listen to the words of My mouth. I will open My mouth in PARABLES, I will utter things HIDDEN from of OLD...."* All these things were there all the time, and all have read them - but they never understood them, because they failed to realize that God was speaking in *parables*. In fact the whole of **Psalms 18** is a parable - and it's about Christ! It speaks of a great battle that occurred on earth, which Christ fought.

Ps 18:3 "I call to the LORD, who is worthy of praise, and I am saved from my enemies. The cords of death entangled me; the torrents of destruction overwhelmed me; the snares of death confronted me. In my distress I called to the LORD; I cried to my God for help. From His temple He heard my voice; my cry came before Him, into His ears. **The EARTH TREMBLED AND QUAKED, and the FOUNDATIONS OF THE MOUNTAINS SHOOK; they trembled because He was angry.** Smoke rose from His nostrils; consuming fire came from His mouth, burning coals blazed out of it. He parted the heavens and came down; dark clouds were under His feet. He mounted the Cherubim and flew; he soared on the wings of the wind. **He made darkness His covering, His canopy around Him - the dark rain clouds of the sky. Out of the brightness of His presence clouds advanced, with hailstones and bolts of lightning.** The LORD thundered from heaven; the voice of the Most High resounded [amid hailstones and bolts of lightning (margin)]. **He shot His arrows and scattered the enemies, great bolts of lightning and routed them. The VALLEYS OF THE SEA WERE EXPOSED and the FOUNDATIONS OF THE EARTH LAID BARE** at your rebuke, O LORD, at the blast of breath from your nostrils. **He reached down from on high and took hold of me; he drew me out of the deep waters. He rescued me from my powerful enemy, from my foes, who were too strong for me. They confronted me in the DAY OF MY DISASTER, but the LORD was my support. He brought me out into a spacious place; He rescued me because He delighted in me.**" Can we be sure that this is referring to Christ? Now notice the marker that God inserted for identification: **V28 "You, O LORD, keep my LAMP burning; my God turns my darkness into LIGHT."** And what verse does this point to? Here it is: **Rev 21:23 "The [Holy] City does not need the sun or moon to shine on it for the glory of God gives it LIGHT, and the LAMB IS ITS LAMP."** Obviously, David is not referring to the time when Christ was crucified, nor was he speaking of his own battles. God, at that time, did not appear with His armies, and nor did He expose the great chasms of the sea. This is speaking of a great rebellion before mankind was put on earth. At that time the earth became a chaotic mess. The state of the earth is described in **Gen 1:1** when God set forth to re-create the earth. At that time it was 'tohu' and 'bohu', which in the original Hebrew describes a chaotic mess.

When Christ fought the *spiritual* battle to qualify for rulership of this planet and the rest of the universe, He had to die, because He had to pay the penalty for all sin throughout the entire realm that He would inherit. And just so that we know where the rebellion started, who was responsible, and what the circumstances were, God gave us a sign! When Christ was killed, a similar scenario described in **Ps 18** is re-enacted: **Matt 27:50** "And when **Jesus had cried out again in a loud voice, He gave up His spirit. At that moment...THE EARTH SHOOK AND THE ROCKS SPLIT...saw THE EARTHQUAKE** and all that had happened, they were terrified..." **Luke 23:44** "It was about the sixth hour and **DARKNESS CAME OVER THE WHOLE LAND** until the ninth hour..."

There are many, many pointers and markers throughout these scriptures and the rest of the Psalms. But God's true servants are obliged to explain the meaning of the parables that Christ spoke while on earth, particularly where they relate to matters under discussion. Christ spoke a parable about a landowner that planted a vineyard: **Matt**

21:33-45 "Listen to another parable: There was a landowner who planted a vineyard. He put a **WALL** around it, dug a **WINEPRESS** in it and built a **WATCHTOWER**. Then He rented the vineyard to some farmers and went away on a journey. When the harvest time approached, he sent his servants to the tenants to collect his fruit. The tenants seized his servants, they beat one, killed another, and stoned a third. Then he sent other servants to them, more than the first time, and the tenants treated them the same way. Last of all, he sent his son to them. 'They will respect my son,' he said. But when the tenants saw the son, they said to each other, 'This is the heir. Come, let's kill him and take his inheritance.' So they took him and threw him out of the vineyard and killed him. Therefore when the owner of the vineyard comes, what will he do to those tenants?"

"He will bring those wretches to a wretched end" they replied, "and will rent the vineyard to other tenants, who will give him his share of the crop at harvest time."

"Jesus said to them, "Have you never read in the Scriptures: 'The **STONE** the **BUILDERS REJECTED** has become the capstone [**CORNERSTONE**], the Lord has done this, and **IT IS MARVELOUS IN OUR EYES**'"? Therefore I tell you that the Kingdom of God will be taken away from you and given to a people who will produce its fruit. **He WHO FALLS ON THIS STONE will be BROKEN TO PIECES, but he on WHOM IT FALLS will be CRUSHED.**" When the chief priests and the Pharisees heard Jesus' parables, **they knew he was talking about them.**"

Did they really *know* that Christ was talking about them? And was Christ *really* talking about them? Christ said He spoke in parables so that they couldn't understand. Here, it seems, they did understand - or they *thought* they did! The truth is they didn't understand the true meaning of this parable! Christ said that He revealed things kept secret from the foundation of the world in the parables He spoke: **Matt 13:35** "So was fulfilled what was spoken through the prophet [**Ps 78:2**]: 'I will open my mouth in **PARABLES**, I will utter things **HIDDEN SINCE THE CREATION OF THE WORLD**. Then He left the crowd and went into the house. His disciples came to Him and said, "Explain to us the parable of the weeds in the field." He answered, "**The one who sowed the good seed is the Son of Man. The field is the world, and the good seed stands for the sons of the Kingdom. The weeds are the SONS of the Evil One, and the enemy who sows them is the devil. The harvest is the end of the age, and the harvesters are the angels. As the weeds are pulled up and burned in the fire, so it will be at the end of the age. The Son of Man will send out His angels, and they will weed out of His Kingdom everything that causes sin and all who do evil. They will throw them into the fiery furnace, where there will be weeping and gnashing of teeth. Then the righteous will shine like the sun in the Kingdom of their Father. He who has ears, let him hear.**"

You will notice that Christ said He spoke in **PARABLES** in which He uttered things **HIDDEN SINCE THE CREATION OF THE WORLD**. In many of the parables, Christ is telling us what happened at the beginning of the creation of this world. It's vitally important that you understand all these things. You are to be caught up in the greatest global upheaval of all time. You will witness the destruction of all the cities on earth. When the great and final rebellion occurs, the earth will be brought to the brink of

total destruction. The works of the devil will be erased from the earth, including all of his seed, and the earth will be restored to its original condition and shape. God will then re-create all the animal life: **Ps 104:29** *"When You hide your face, they are terrified; when You take away their breath, they die and return to dust. When You send Your Spirit, they are **CREATED**, and You **RENEW THE FACE OF THE EARTH**."*

The Bible is a **BOOK OF LAW**. It is the **LAW BOOK** from which all will be judged. From cover to cover the Bible speaks of legal matters. With great frequency we see terms such as court, witnesses, judgment, justice, testimony, accused, and dozens of other such terms. **CHRIST OBEYS THE LAW OF HIS FATHER**, the devil does not! The whole purpose of our existence is to gather evidence against Satan the devil. Christ came to destroy the works of the devil (**1Jo 3:8**). Christ came to save this world, this earth, and to destroy all that the devil has done. Notice what He said in this regard: **John 12:47** *"As for the person who hears My words but does not keep them, I do not judge him. **For I did not come to judge the world but to save it. There is a Judge** for the one who rejects Me and does not accept My words, **that very word which I spoke will condemn him at the last day.**"* When the Father sits at the **GREAT COURT** (**Dan 7:9-10**) He will judge according to what Christ spoke, and condemnation will follow according to His words.

Fellow Christians, you are witnesses for the prosecution, and you are a part of the great evidence-gathering process. If need be, you are to be cannon-fodder in the final battle when Christ will return and physically save this world from total destruction. While you must now suffer many things, God will not forget you, and He will reward you for your faithful duty. We must keep our eyes focused on God. Notice what He says: **Ps 46:1** *"God is our refuge and strength, an ever present help in trouble. Therefore we will not fear, **THOUGH THE EARTH GIVE WAY and the MOUNTAINS FALL INTO THE HEART OF THE SEA, though its WATERS ROAR AND FOAM AND THE MOUNTAINS SHAKE WITH THEIR SURGING. There is a river [Eze 47:1, Rev 22:1] whose streams make glad the CITY OF GOD, the Holy Place where the MOST HIGH DWELLS. God is within her, she will not fall; God will help her at BREAK OF DAY [dawn]. NATIONS ARE IN UPROAR, KINGDOMS FALL; He lifts His voice, THE EARTH MELTS. The LORD Almighty is with us; the God of Jacob is our fortress. Selah. Come and see the works of the LORD, THE DESOLATIONS HE HAS BROUGHT ON THE EARTH. He makes wars cease to the ends of the earth; He breaks the bow, and shatters the spear, He burns the [chariots] with fire. "Be still, and know that I am God; I will be exalted among the nations; I will be exalted on earth." The LORD Almighty is with us; the God of Jacob is our fortress.**"*

Nothing will befall you that will not befall everyone else on earth. The great difference is that your future is secure in the Kingdom of God if you remain faithful to God. He will either resurrect you or bring you back from captivity and slavery. You must accept God's will and be willing to obey to the end. He will decide where you will go and what will happen to you (**Rev 13:10**). Be faithful! The greatest tragedy of all is that many will listen to the false prophets as they weave their spell of 'safety and deliverance' if you 'follow them.' If you follow them, you will die, but you will not be resurrected to life, but

to death in the fiery furnace. You've listened to the mindless ratbags, now start listening to God! Believe the Bible!

It was to King David that God entrusted the greatest volume of information concerning the former things and the things that are to come. And it's through the seed of David and his family line, and the tribe of Levi, that this information is to be made known to the world (**Zech 12:10-14**). And specifically, to two men who are prophets; one from the tribe of Levi, and one from the tribe of Judah (See the article: ***The Two Endtime Prophets***). He will not yield His glory to another (**Isa 48:1, 11**). **Ps 78:66-72** *"He beat back His enemies; He put them to lasting shame. Then He rejected the tents of Joseph, He did not choose the tribe of Ephraim; but He chose the tribe of Judah, Mount Zion, which He loved. He built a sanctuary like the high mountains, like the earth that He established forever. He chose David His servant and took him from the sheep pens; from tending the sheep He brought him to be shepherd of his people Jacob, of Israel His inheritance. And David shepherded them with integrity of heart; and skilful hands he led them."* The sanctuary that God built like the high mountains, will be established forever like the earth, but it is not yet on earth. When it is, David will be a shepherd over the flock (**Eze 34:23**). David had much to say about the state of the earth:

Ps 82:5 *"They know not, neither do they understand; they walk on in darkness: ALL THE FOUNDATIONS OF THE EARTH (Strong's Conc. [0776] landmass, countries, ground, nations) ARE OUT OF COURSE!"* (KJV) The words 'out of course' have special meaning. Strong's Concordance renders it from the Hebrew word 'mowl' [Strg: 4131]. This word means 'to totter, shake, slip, to be moved, to dislodge.' Yes, the continents of the earth have been moved and are **out of course!** They have been dislodged and have slipped across the broad surface of the earth. The Almighty God has confirmed this in writing!

Ps 96:10 *"Say among the nations, The LORD REIGNS; the world is firmly established, it cannot be moved; He shall judge the peoples with equity."* Yes, God is going to stabilize the earth once more - when He reigns! He will restore it once more to its original shape and condition. Everything will be made new! **Rev 21:5** *"He who was seated on the throne said, "I AM MAKING EVERYTHING NEW!" Then He said, "WRITE THIS DOWN, FOR THESE WORDS ARE TRUSTWORTHY AND TRUE."*

Ps 97:1, 5 *'THE LORD REIGNS...THE MOUNTAINS MELT LIKE WAX before the LORD...'* Here we have an exact time setting! The LORD **reigns** and the mountains melt like wax! Because the false prophets in the past have not understood Bible prophecy, they have endeavoured to substitute 'spiritual' meanings for words like 'mountains'. 'Mountains,' they implied, was spiritual talk for problems and worries. Presumably, the **STONE** that became a great **MOUNTAIN** [which is Christ] and filled the whole earth (**Dan 2:44**) represents 'problems and worries.' What disgusting blasphemers these people are! How right was Jude when he said, *"Yet these men speak abusively against whatever they do not understand, and what things they do understand by instinct, like unreasoning animals - these are the very things that destroy them."* (**Jude 1:10**).

Ps 136:1, 4-6 'Oh, give thanks to the LORD, for He is goodto Him who alone does great wonders ...to Him who by wisdom made the heavens ...to **Him who LAID OUT THE EARTH** (Strong's: 0776 landmass) **ABOVE THE WATERS** ...to Him who **MADE THE GREAT LIGHTS** ...the sun to rule by day ...the moon and the stars to rule by night..." (NKJV). Here is further clear evidence that the earth and its foundations refer to the part of the terrestrial globe that is *above* the oceans!

These verses describe some strange events. The depths [Heb: great ravines] of the oceans will be exposed, and the surface of the earth laid bare. We are also told that the foundations of the earth, or the landmass, are out of course and that God is going to establish the world so that it will not be moved (Strong's Conc: World [8398] means the land of the nations, the habitable parts. By extension it can mean the physical globe. That the world was a globe was not known to the earliest translators anyway). When Christ reigns the mountains will melt like wax. The reference to the world being established that it shall not be moved - gives us a clear indication that it has been moved in the past! Otherwise there would be no point in establishing it to prevent movement.

In the book of Acts, we are told that Christ is to restore all things when He returns: **Acts 3:21** "*He must remain in heaven UNTIL THE TIME COMES TO RESTORE EVERYTHING, as He promised long ago through His holy prophets.*" So Christ is to REMAIN in heaven 'UNTIL THE TIME COMES..' The time for **WHAT? TO RESTORE EVERYTHING!** If, as some false teachers believe, this refers to Bible knowledge, then no-one will understand the Bible until *after* Christ returns. Yet Christ says that all knowledge will be revealed: **Luke 12:2** "*There is **NOTHING CONCEALED** that will **NOT BE DISCLOSED**, or **HIDDEN** that will not **BE MADE KNOWN**.*" So it's not truth that Christ is to **RESTORE AFTER HE COMES**; this is to be done before He comes. **CHRIST IS TO REPAIR OR RESTORE ALL THINGS.** The *overwhelming* evidence of many scriptures throughout the Bible proves that God is to **RESTORE THE ORIGINAL LANDMASS OF THE EARTH.** The prophet David was God's instrument in recording many of these things. The Bible even speaks of a special 'key' of David. This key is the key to the door of prophecy, the open door to the understanding of all things: **Rev 4:1** "*After this I looked, and there before me was **a door standing open in heaven**. And the voice I had first heard speaking to me like a trumpet said, "Come up here, and I will show you **WHAT MUST TAKE PLACE AFTER THIS**."* In **Rev 3:7-8** this **KEY OF DAVID**, which Christ has, is linked to a door in heaven, from which all **UNDERSTANDING OF PROPHECY** must emanate! And this knowledge will only be given to those of the southern kingdom of Judah - **NOT** the northern kingdom of Ephraim and the 10 tribes! Only the tribe of Judah will be authorised to teach this knowledge, and more particularly, the clans of the House of **DAVID** *AND* the clans of the House of **LEVI (Zech 12:10-14)**. Notice **Rev 3:7-9** "*To the Church in Philadelphia write: "These are the words of Him who is holy and true, who holds the **KEY OF DAVID**. What He opens, no-one can shut; and what He shuts no-one can open."* This speaks of Christ, and only Christ can remove the seals of prophecy (**Rev 5:3-5**). Continuing: "*I know that you have little strength, yet you have not denied My name (Christ's name). I will make those who are of the synagogue of Satan, **WHO CLAIM THEY ARE JEWS THOUGH THEY ARE NOT, BUT ARE LIARS** - I will make them*

come and fall down at your feet and acknowledge that I have loved you." Only **TRUE** Jews will be sought out to explain the truth of God when the coming 'hell on earth' arises! **(Zech 8:23)**.

THE KEY OF DAVID

The Great Seal of the house of David was the star or seal of David. By the 3rd century AD Jewish artisans were still using the design but were calling it the 'Seal of Solomon' (See The Bible Almanac by Packer, Tenny, White - page 501). It was most common to find an imprint of the Seal of David on high grade Jewish pottery even more than a thousand years after David. It's the design of David's Seal that has been preserved for our time, and while it is called the Star of David, it is indeed the Great Seal of his Royal House of David. It's most unfortunate that it's called a star, because it's not a star at all! In reality it's two interwoven pyramids surrounded by a circle. One of the pyramids is upside down. This reflects the current condition of the earth, which is currently upside down.

What this seal is showing is that the earth as it was created when the angels shouted for joy was in the shape of a pyramid embossed on the face of the earth. The continents at that time were a single landmass. God has now revealed exactly what has happened to the earth - why it became chaotic and why all the foundations are out of course.

JERUSALEM - THE CENTER OF THE EARTH

Jerusalem is to be the centre of the earth once more. If you move all the scattered landmasses of the earth back towards Jerusalem, you will end up with an inverse pyramidal shape. Go ahead, trace out the major landmasses of the earth and make cutouts. Then move them all towards Jerusalem and see what general shape you get! Bear in mind that all the landmasses have suffered distortions, but you will see that the geometric shape that results, is unmistakably a triangle or pyramid shape.

As a matter of interest to all true Bible students, God has a signet ring on His finger - the signet is a pyramid! The pyramid shape is a symbol of God's power and authority, it is also a symbol of His Son - the chief **CORNERSTONE**. Even the New Jerusalem will be pyramidal in shape and the uppermost block or cornerstone will represent Jesus Christ, the Son of God.

God has blinded the wise of this world so that they could never figure out the mystery of planet earth's geological history. In their blindness and madness they have developed all sorts of theories to account for what they correctly recognize as continental displacement.

The latest theory is the 'tectonic plate' theory where they have assumed that convection currents of molten or plastic magma facilitate continental movement as an on-going process. While still active in 'scientific' circles, the greatest setback for the theory is that in 25 years of monitoring what they call active 'rifts' they have never succeeded in measuring any movement. The theory demands movement in the order of 3 to 5

centimetres per year to comply with their estimates of time and the distances that the continents have travelled.

Both the French and the U.S. have had satellites equipped with Global Positioning Systems (GPS) active in space for many, many years, that are capable of measuring as little as a centimetre of movement with great accuracy. They have never been able to detect any lateral movement! And they never will! At least, not until the Day of the LORD and the restoration of the earth!

On the authority of Almighty God, the writer issues a challenge to all earth scientists to provide evidence, that will stand up to scientific scrutiny, of their claimed 3-5 cm of continental movement per year. **IF THEY CAN PROVIDE THE EVIDENCE, THEN THE WRITER WILL PROCLAIM IT IN A MAJOR NEWSPAPER ON EVERY CONTINENT ON EARTH, TOGETHER WITH A PERSONAL RETRACTION FOR EXPRESSING DOUBTS ABOUT THEIR INTEGRITY.** Again, on the authority of Almighty God, they cannot, and will not, ever do it!!!

Most of these foolish people believe it's already been done. They speak about it as fact. They assume that the results of all the projects set up to measure earth's crustal movement, have been published. There have been a couple of phoney reports that purported to prove crustal movement, but these were discredited the moment they were published. One involved a GPS measurement across the entire width of the North American continent, but the 'sage' that wrote this paper forgot to allow for the satellite's orbit correction which is effected by sun flare activity, time of day, and a number of other factors. Astute astro-physicists nailed him the moment he released the paper! We heard nothing more from the fool that wrote the paper!

The cause of the continental displacement that is evident today happened *millennia* ago, before Adam and Eve were created. Yes, you did read that right! The word is '*millennia*' or *thousands of years*, not millions of years! This same event that resulted in the destruction of the original landmass is what destroyed the world of the Dinosaurs. This was the world that Lucifer ruled over. It was the world that caused great rejoicing in heaven when the angels shouted for joy when it was created. **(Job 38:7).**

The Bible doesn't tell us much about this rebellion. However, it does say this:

Isa 14:12-14 *'How are you fallen from heaven, O Lucifer, son of the morning! How are you cut down to the ground, which did weaken the nations! For you have said in your heart, I will ascend into heaven, I will exalt my throne above the stars of God; I will also sit upon the MOUNT of the congregation in THE SIDES OF THE NORTH: I will ascend above the HEIGHTS OF THE CLOUDS; I will be like the Most High.'* (KJV).

This describes the fall of Lucifer who became the devil. He wanted to be equal with God and exalt himself above all the heavenly host. To do this he decided to sit upon the Holy Mountain (the mount of the congregation). This mountain extended above the clouds, so obviously it was on earth! The earth's landmass, at that time, was a pyramid shape. The

reference to '*the sides of the north*' refers to the two sides that formed the apex. As with all Bible references, we don't have to guess what it means, because the Bible always explains. Using references as pointers we turn to **Ps 48:1-2** "*Great is the LORD, and greatly to be praised in the city of our God, in His holy mountain. Beautiful in elevation, the joy of the whole earth, is Mount Zion ON THE SIDES OF THE NORTH, the CITY OF THE GREAT KING.*" Here God clearly tells us that Mount Zion is the mountain in the sides of the north and that it is a city of the Great King! Notice also the words '*beautiful in elevation.*'

Obviously the height or elevation of this Holy Mountain was a feature of its beauty. **Isa 14** says it rose above the clouds! Also notice the words '*joy of the whole earth.*' This scripture is referring to the Mount Zion in Jerusalem - on earth! This is the **SACRED AND HOLY MOUNTAIN OF THE GREAT KING!** Today that mountain has been all but destroyed. No longer does it extend above the clouds. Just the merest trace of its apex exists today as a remnant of its former glory. Christ mourned the loss of this glorious Mountain. It had very great significance to Him. It's on this former Mountain that Lucifer wanted to set his throne!

Today, Omar's mosque, or the Dome of the Rock as it's usually called, covers this Mountain remnant. This is all about to change! Very soon now, two prophets will appear in Jerusalem and will set about to build the Temple of God. God has given us an insight into the duties of these two men by using former servants as foretypes of them. One of these foretypes was Zerubbabel. It is his duty to bring forth the capstone [CORNERSTONE] - the very apex of Mount Zion! It is his job to prepare the foundation for the Temple, and he will complete this foundation! **Zech 4:6-10** "*So he said to me, "This is the word of the LORD to Zerubbabel, 'Not by might nor by power, but by my Spirit,' says the LORD Almighty. "What are you, O MIGHTY MOUNTAIN? Before Zerubbabel you will become level ground. Then he will bring out the CAPSTONE to shouts of 'God bless it! God bless it!' Then the word of the LORD came to me: "The hands of Zerubbabel have laid the FOUNDATION of this Temple; his hands will also complete it. Then you will know that the LORD Almighty has sent me to you. Who despises the day of small things? Men will rejoice when they see the plumb-line in the hand of Zerubbabel."* Other articles cover this prophecy in greater detail, but briefly it's about the clearing of the Holy Mountain in Jerusalem in preparation for the building of the third Temple. All the refuse must be removed, and particularly the building that stands over the CORNERSTONE of Mount Zion. How will this be done? God tells us '*Not by [human] might, nor by [human] power, but by My SPIRIT.*' The Hebrew word used here for 'spirit' is not definitive; but in the context of what is said, would indicate that God will send a mighty spirit being to complete this task.

There will be some who won't rejoice when this happens. They will consider the small hill of rock that is exposed to be of no consequence. God prefaces this great event with '*Who despises the day of small things?*' Others, who love God, will rejoice! That blessed capstone represents the Messiah, Jesus Christ! He represents the illuminated cornerstone, the uppermost stone of the pyramidal City of God. The capstone of Mount Zion, commonly called Mount Moriah, will be a constant reminder forever of the great

rebellion that lead to the destruction of the earth. It will be afforded a place of honour forever in the Temple of Almighty God - finally! Before this happens another prophetic event occurs. The second beast of Rev 13 does exactly what Satan tried to do millennia before; he sits in the Holy place and claims to be God. This prophecy is extensively covered in other articles.

There are strong indications that God's heavenly throne today is not far away. What we see in the heavens, strictly speaking, is not truly representative of what exists there. When Christ returns, the heavens are to part like a curtain - just like the great veil of the tabernacle (**Ps 18:9**). There is already a new heavens designed and ready - its just that we cannot yet see it.

King David prophesied of the time when Christ returns and the heavens are parted. These verses are both history and prophecy: **Ps 18:7** *"The earth trembled and quaked, and the foundations of the mountains shook; they trembled because He was angry. Smoke rose from His nostrils; consuming fire came from His mouth, burning coals blazed out of it. He parted the heavens and came down; dark clouds were under His feet."* **V12** *"Out of the brightness of his presence clouds advanced, with hailstones and bolts of lightning. The LORD thundered from heaven; the voice of the Most High resounded. He shot His arrows and scattered the enemies; great bolts of lightning and routed them. The valleys of the sea were exposed and the foundations of the earth laid bare at Your rebuke, O LORD, at the blast of breath from Your nostrils."*

This is a prophecy for the endtime, when Christ will give invincibility to David's descendants. Notice **V50** *"He gives the king great victories; He shows unfailing kindness to His anointed, to David and his descendants for ever."* The king referred to here is the king who will sit on David's throne in Jerusalem as the caretaker king (**Zech 6:11-15**) and he will be a father to those in Jerusalem and Judah (**Isa 22:21**). Those of the clans of David who repent and turn to God will become an invincible force: **Zech 12:2** *"I am going to make Jerusalem a cup that sends all the surrounding peoples reeling. Judah will be besieged as well as Jerusalem. On that day, when all the nations of the earth are gathered against her, I will make Jerusalem an immovable rock for all nations. All who try to move her will injure themselves."* **V6** *"On that day I will make the **LEADERS** of Judah like a fire-pot in a woodpile, like a flaming torch among sheaves. They will consume right and left all the surrounding peoples, but Jerusalem will remain intact in her place."*

David also foretold this: **Ps 18:43** *"You have delivered me from the attacks of the people; you have made me the head of nations; people I did not know are subject to me; foreigners cringe before me. They all lose heart; they come trembling from their strongholds."* It will be the clans of David that will make up this mighty force (**Zech 12:10-14**). All of this occurs when God once again '*exposes the valleys of the seas and the foundations of the earth are laid bare*' - **Ps 18:15**.

Most of those in the Churches of God have, in the past, recognized that certain major structural changes are to be made to the earth in the region of Jerusalem. In the book of

Zechariah, we learn of some major site works that will occur at Christ's return. The Mount of Olives is to split in two with half of the mountain moving north and the other moving south. This will form a great plain or plateau over a wide area. The area of the temple mount, Mt Moriah, will then be lifted up, or elevated, to form a great plateau **(Zech 14:4, 10.)**

Following Lucifer's original rebellion, a mighty battle ensued. Christ testified to seeing Lucifer falling like lightning from heaven **(Luke 10:18)**. What occurred after Satan's initial rebellion was a battle that the human mind could not begin to comprehend. What forces were unleashed? What awesome weaponry was used? Nothing in the annals of human experience could begin to understand it. **AND IT'S SOON TO HAPPEN AGAIN!** The world is soon to see the most awesome display of supernatural power that will literally leave people mindless with fear. There will be no natural explanation for it. **Rev 12:7** "*And there was **WAR IN HEAVEN**. Michael and his angels fought against the dragon, and the dragon and his angels fought back. But he was not strong enough, **and they lost their place in heaven**. The great dragon was **HURLED DOWN** - that ancient serpent called the devil and Satan, **who leads the whole world astray**. He was **HURLED TO EARTH**, and his angels with him. Then I heard a loud voice in heaven say: "**Now have come the salvation and the power and the KINGDOM of our God, and the authority of His Christ**. For the accuser of our brothers, who accuses them day and night, has been hurled down. They overcame him by the blood of the Lamb and by the word of their testimony; they did not love their lives so much as to shrink from death."* This event occurs just a few years before the Great Tribulation, and most will see it in their own lifetime!

END OF CHAPTER ONE

ON FINDING AN ICE AGE BOOK

by <mailto:northrup@brigadoon.com>

ABSTRACT

This chapter is a revision of that which originally was published after one of my creation conferences by Colonial Hills Baptist Church in East Point, Georgia sometime in the early 1970's. It also has been part of well over a hundred conferences in many states and several countries. For years it was part of my class notes for Genesis 1-11 entitled "In the Beginning," for Central Baptist Seminary in Minneapolis where I was Director of Graduate Studies. It describes my abrupt awakening to the requirement by the catastrophic contents of the Book of Job that I recognize a post-Noahic flood, thoroughly Biblical, ice "age" catastrophe.

For years believers have wrestled with the problem of science and have wondered how we could ever reconcile the many things which are found in the crust of the earth with that which we read in the Scriptures concerning earth's early events. Many creationists have puzzled over the major areas of disagreement and tentatively have provided approaches to harmonization which they thought might help to explain the apparent contradiction between the Word of God and the work of the Creator. These harmonization models have been helpful in that they provided an avenue of escape from uniformitarian dogmas which have proven to be destructive to the uninstructed faith of many students of the natural sciences. But in every case these models have proven inadequate in that they have ignored major pieces of the puzzle. For example, the gap theory completely ignored the physical evidence of a period of earth's history when an icy catastrophe troubled the entire earth with massive, continuous cloud cover, with torrential rains in the regions nearer the equator and with vast snow falls in regions nearer the northern and southern poles. The Noahic flood model likewise has ignored this evidence of the "ice age" and the massive signs of continental volcanism in Cenozoic deposits which preceded it. These things were impossible to fit into the classical form of the flood model and largely were ignored. In recent years it has become popular to tack these physical evidences onto the conclusion of the Noahic flood in a vague, undefined way which leaves multitudes of unanswered questions.

The model which I propose in this paper is extremely helpful in understanding the genesis of geology and the confirmatory testimony which the careful study of the physical sciences actually gives to the statement of the Scriptures about earth's earlier events. Through this model I have concluded that Genesis and geology both have exactly the same message. Now this does not require adapting Genesis to geology at all, but rather casts the light of the facts of geology upon the text of Genesis so that we can recognize the wider catastrophic nature of the Biblical testimony. Once the researcher

eliminates the fallacious assumptions of geological time, assumptions and miscalculations which are so critical to evolutionary historical geology, the two accounts remarkably carry the same message. The fact that the two records which always have played the same tune only becomes recognizable when one plays the geological record at the same speed as the Biblical record! Suddenly every glissando, every crescendo and every andante passage produce sufficient harmony that one can recognize that the two scores came from the same Master.

Many years ago I was speaking at Maranatha Baptist Bible College in Wisconsin concerning creation. During the week I had completed the consideration of earth's earlier events in Genesis, the outpouring of the pre-Adamic flood, the uplift of the great single continent in the third solar day, the Noahic flood and the division of the continents as presented in Genesis 10. I was preparing to speak on the ice age in geology the next day. I was thoroughly convinced that there had been a very Biblical ice age after the Noahic flood for I had followed the courses of several of the glaciers on our own continent and had viewed their great rivers of ice in British Columbia and in Alaska. Since then I have been able to observe these vast rivers of ice in the Andes, in the Alps and in the Himalayas. While meditating about the problem of an ice age within Biblical times, a thought struck me. Surely, if this were true, there should have been a great amount of testimony concerning the ice age available in the Bible, given by those who actually lived during that catastrophic time. Suddenly a flood of secondary revelation began coming to me as the Holy Spirit, the Divine Author, began to point out to me in His Holy Word many places where the ice age actually is mentioned. I had read these many dozens of times, teaching from a theological viewpoint, and utterly had missed the import of these passages concerning the geological disturbances and the climate disturbances which are recorded in His Word! The Lord led me to the Book of Job and showed me that here was a book that had actually been written during the Biblical ice age.

I. THE ANTIQUITY OF THE BOOK OF JOB

Now the geologist walks hand in hand with the philosophers who need billions of years for their gods, Time and Chance, to produce the present world. As a result he wants to place the ice age in a setting which began more than a million years ago with its influence continuing to retreat even today. For several generations students of all ages from kindergarten through graduate school have been taught inventive fictions about the gradual development of cave men and how man gradually had evolved out from his animal ancestry. Today the doors of public education are as tightly closed against the teaching of any criticism of this approach as are the classrooms of China to a consideration of the Word of God and to the true and living God. The fiction of man's gradual evolution out of animal still finds a gullible market in the carefully designed deceptions of books like Mitchner's "Source" and several, often pornographic, book series attempting to describe the life of man and, for some reason, especially women during the ice age.

A. A Witness who Describes the Ice Age

I had long been convinced that mankind had lived on earth throughout the icy catastrophe which left its unmistakable scars on earth's final layers. I also was convinced that the period had not lasted for over a million years. What I discovered when I began reading the Bible with open eyes and finally understanding what its human writers were saying, was that mankind indeed had passed through the trial of an icy catastrophe. One writer in particular had recorded a remarkable amount of information about life during that exceedingly violent period in the land of Israel. And I began to recognize that Job was not merely describing the effects of the Biblical ice age in the Levant countries. He includes an amazing amount of information about the violence of that time of great geological activity during the period in which he lived in the land.

It was a period when all of Europe was gripped in a terrible series of ice storms which forced humankind who had migrated into that area from Babel to survive in caves. They lived a meager existence in great competition with the animal life which also was there. Storms raged that seemed to be continual. It is possible that for months in the most intense time of trial man did not even see the sun. He was not able to grow crops. The midden piles at the cave mouths indicate that he survived on what game which he could kill and on the edible wild plants, wild grasses and grains that he could gather. In the land of Israel man was living south of the great ice cap which sheathed much of Europe. Nevertheless he was experiencing great turmoil. The Pleistocene Epoch, the Biblical ice age, was a time when the great Jordan valley was coming into existence. The strata in that area were being ripped apart by the release of tensions which had reshaped the face of the entire earth in rapid continental plate separation. The rifting of the Jordan valley is a historical event that happened in the latter part of the dividing of the continents. In that statement I am not following the chronology of the uniformitarian for I believe that the dividing of the continents was one of the most violent and abrupt of the five great Biblical catastrophes that have troubled the whole earth. Geologists tell us that the great African Rift, of which the Jordan Valley is but a small part, was a fairly "recent" event but they do not mean by "recent" that which I mean. It was during the time when Noahic flood and retreat of flood deposits were being ripped apart by crustal tensions, developing a great horst and graben structure. That is, as the east and west walls of the new valley were being pulled apart and separating from each other, the materials of these also were settling into the great fault which now is a major feature of the Eastern Mediterranean Levant of which Israel and Jordan are a part. It was during the time that this great valley was being formed that the basins which now contain the Sea of Galilee and the Dead Sea were formed. The latter basin is the lowest place on earth that is not beneath the seas.

I believe that there is very strong evidence that Job lived during that day and makes several references to the development of that great valley. Contrary to the conclusion of many writers that Solomon's men or someone else much later than Job put together the book of Job, I am convinced that Job himself wrote this book. And the remarkable geological and climatological references found in the book makes it almost inescapable that Job actually lived within the scope and beyond the so called Pleistocene Epoch, the Biblical ice age. Indeed, It is highly probable that Job lived in or more likely near the

land of Israel in the days when Lake Lisan, the body of water which once connected the Sea of Galilee and the Dead Sea, still existed. I proposed long ago that Job actually lived during the Biblical ice age and that it was he who personally recorded the many very specific geological and climatological details which are embedded in the book which carries his name. It would be impossible for an author, living long after the tumultuous times in which the events of the book of Job took place to describe these factors unless the work of the human author is wholly discounted and the work of the Divine Author is magnified beyond the balance taught in Scripture.

B. A Man who knew how to write in the Ice Age

Now we must not believe the error of earlier archaeologists who thought that writing had not been invented at the time in which Job lived when people were just moving out of caves in which they had escaped the icy catastrophe. And by the way, that factor is directly mentioned in the book of Job. The text of the book of Job clearly shows that Job knew how to write. After all, there are several references in the book of Job to writing. Note Job 19:23. "Oh that my words were now written! Oh that they were printed in a book; that they were engraved with an iron pen and lead in the rock forever!" The references to metallurgy should also be noted here. Job 13:26 says of God: "For You write bitter things against me" In Job 31:35 the godly patriarch complains about the imaginary accusations of sin in his life which He supposes God sees. Oh, that one would hear me! Behold, my desire is that the Almighty would answer me, and that my adversary had written a book. Surely I would take it upon my shoulder and bind it as a crown to me."

C. A Book Written when men had lived in Caves

The book of Job makes many interesting contributions to our understanding of what actually went on in Israel during the Biblical ice age. Job long had endured the imaginary criticisms of his three counselors as recorded in the first three quarters of the book. Finally, in a remarkable way, Job bitterly strikes out in disgust against his three "counselors" and in the process unveils the immediate ancestry of these three men. He gives us insight into the severe trials which mankind, even as far south as the eastern Mediterranean, endured during the ice epoch. He does it in such a way that it strongly suggests that the violent weather consisting of fierce downpours of rain, snow, hail and freezing, which had driven many men into caves for protection during the severe stage of the Biblical ice age now was retreating. He says of his three pompous counselors:

"But now they mock at me, men younger than I, whose fathers I disdained to put with the dogs of my flock. Indeed, what profit is the strength of their hands to me? Their vigor has perished They are gaunt from want and famine fleeing late to the wilderness, desolate and waste. Who pluck mallow by the bushes, and broom tree roots for their food. They were driven out from among men , They shouted at them as at a thief). They had to live in the clefts of the valleys, in caves of the earth and the rocks. Among the bushes they brayed. Under the nettles they nested. They were sons of fools, Yes, sons of vile men; They were scourged from the land. And now I am their byword. They abhor me, they keep far from

me; They do not hesitate to spit in my face. Because He has loosed my bowstring and afflicted me, they have cast off restraint before me. At my right hand the rabble arises; they push away my feet, and they raise against me their ways of destruction. They break up my path. They promote my calamity; they have no helper. They come as broad breakers [tidal waves]; under the ruinous storm they roll along. Terrors are turned upon me; they pursue my honor as the wind and my prosperity has passed like a cloud" (Job 30:1-15 NKJV).

A careful examination of this passage will reveal several important hints about the time in which Job and lived and about the violence of the catastrophic period through which they recently had passed.

a. The Timing of the Ice Age with Reference to the Bible

A thoughtful perusal will show the impossibility of holding that the Biblical ice age was part of the Noahic flood. Job and the people of the land were settled in that area. The more fortunate like Job had large herds of cattle. There were so many people that they were divided up into clans. The area where Job lived was called "the land of Uz" (Job 1:1), apparently named after a predecessor who had lived there some time before. And it should be noted that the first mention of the name "Uz" being given to a man in the Bible is not until Genesis 10:23 where Uz is mentioned as a grandson of Shem who would have been born long after Noah's family had left the ark. This assumes that there are no generation gaps in this account. It is interesting to note that it is after the second generation has been born to Japheth, Shem's brother, that the division of the nations at Babel took place. Immediately after enumerating the names of Japheth's second generation this statement is made. "From these the coastland peoples of the Gentiles were separated into their lands, every one according to his language, according to their families, into their nations" (Gen. 10:5).

b. The division in the Fifth Generation after the Noahic flood

How long was a generation in those days? The answer depends upon which textual source one follows. The Hebrew describing the genealogy of Shem in Genesis 11:10-24 provides the concept that a generation at that time lay between 30 and 35 years. The Hebrew chronology announces 101 years between Shem's departure from the ark and the birth of Peleg, ". . . in whose days the earth was divided" (Gen.10:25). The ancient Septuagint Greek translation and the Samaritan (Hebrew) Pentateuch strongly disagree and suggest the possibility that the Hebrew chronology has been abbreviated for some unknown reason. The Septuagint text provides the following table of generations between Shem's departure from the ark and the birth of Peleg.

2 years from Shem's leaving the ark to the birth of Arphaxad

135 years before Arphaxad fathered Kainan
(who is omitted in the Hebrew text but is present in the Septuagint and in Christ's genealogy in Luke 3:36).

130 years before Kainan fathered Salah

130 years before Salah fathered Eber

134 years before Eber fathered Peleg

531 years total between leaving the ark and the division of the earth.

c. The implications of the chronology of continental division.

Note that this argument is two edged. It strikes against Patton's proposal that the ice epoch is the catastrophe which triggered the Noahic flood, an anachronism which flies in the face of all of the geological evidence and of the testimony of the book of Job which describes life during that ice epoch. All of the physical evidence in the world demonstrates that the latest catastrophe to trouble the whole world was the Biblical ice epoch. And that evidence unquestionably indicates that the ice epoch followed the separation of the continents and the massive diastrophism of the latter half of the so called "Mesozoic Era" and most of the "Cenozoic Era." And the physical evidence, when thoughtfully examined, leaves the creationist no room to conclude that these periods of the earth's history are part of the Noahic flood. They clearly are post-Noahic flood except in areas like California which rose out of the sea only after the titanic pressures of continental plate movement forced the area up out of the sea.

I have flown alongside enormous glaciers along the west coast of North America and South America from southern Alaska to just south of the equator in Ecuador and Peru. I have crossed the Alps repeatedly and have flown along their southern edge from Portugal to Greece. I have flown into India repeatedly and have explored along the high, crushed foothills of the Himalayas, able to study from a distance the great marine strata that are crushed, uplifted and intruded by giant volcanoes and still support great glaciers. Everywhere these glaciers are deposited upon crushed and folded strata resulting from South America's departure from Africa and Antarctica in violent continental plate separation. The deposits of the Noahic flood on the opposing continents across the Atlantic terminate at the continents' edges. There are absolutely no Noahic flood deposits on the bottom of the Atlantic Ocean for it was not there when the Noahic flood covered the great single continent implied by Genesis 1:9 and separated in the days of Peleg beginning in Genesis 10:25.

Noahic flood deposits are lifted from hundreds of feet to many thousands of feet in the Andes by the crushing, buckling and intruding forces produced along the leading edge of South America as its leading edge dove into the great Humboldt trench 20,000 feet below the sea along the western edge of the continent. The great glaciers of the world are deposited on the volcanic ejecta and the folded flood strata that was folded well after the Noahic flood. I first recognized a glacial valley in that kind of material at 10,000 feet on the jeep road to Cuzco, the ancient capital of the Incas. But more often glaciers and their destructive trails and U shaped canyons are found on the great rubble piles of ejecta left by the volcanics which, as a more recent event, intrude their way up through the flood

strata out of the hot zones produced by continental plate override. In the Andes the heat appears to have boiled up under the crust of the new continent, South America, as the leading edge dove into the great Humboldt Trench in subduction. The crust reshaping heat of the leading edge of our own great plate produced by its overriding of the Pacific ocean bottom powered the intrusions and uplifts of most of our western mountains. That is true of true throughout the Central Rockies where the continent apparently overrode and settled over a hot plume welling up out of the rheosphere, of the Sierras, the Klamath Mountains, the Cascades, the Northern Rockies and the Canadian Rockies wherever I have examined them.

Mt. Lassen on the north end of the Sierras is a local example that is only 45 miles from my home. It intrudes upward through and utterly ruptures Noahic flood and retreat of flood strata which almost everywhere rim the Great Valley of California. On the east side of this major feature of California these formations butt up against and ride up the uplifted slopes to the point where massive ice age precipitation and ice melt erosion removed them and deposited them many thousands of feet deep in the Great Valley. Only an occasional pendant formation of Noahic flood materials clings to the great intrusive ridge that is littered with extrusive materials from the volcanoes which rose it. A beautiful example of sedimentary deposit which I have identified as a pendant, Noahic flood deposit lies along the northwest shore of Fallen Leaf Lake on the west shore of Lake Tahoe. Another great mass of this material lies near Tioga Pass road as it descends the east side of the Sierras out of Yosemite Valley. East of Mt. Lassen on the west side of the Great Valley the Paleozoic, Noahic flood deposits and the overlying retreat of flood Mesozoic deposits sweep up the eastern edge of the Coast Range, thinning out as they rise. It must be remembered that the coast was far inland near Nevada before the plate movement activity produced the State of California by grinding, intruding and uplifting it out of the sea as a result of post-Noahic flood continental division.

The Coast Range, against which these strata lie in the northern Sacramento Valley, largely consists of an enormous amount of ocean bottom materials which have been crushed, course ground and then swept ashore on the rising, leading edge of the continent without being polished by agitation along a beach. Of course there are also great injections of granite, the reworked material that has been molten by subterranean heat before its injection. There are large layers of chert, the indurated and distorted layers of submarine ash ejecta. There are great sections of blue schists, serpentine and other materials from the depths.

The intrusions found in the Coast Range, and the extrusions in the Sierras and the contiguous Klamath Mountains are more recent than the flood and retreat of flood strata through which they intrude. They are considerably more recent than the great layer of Cenozoic materials which the Biblical ice epoch has stripped from these mountains and deposited in the Great Valley. The northwest end of the Great Valley just southwest of Redding has been a remarkable source of Mesozoic ammonites which died when they were trapped or cooked in that area by the heat release of the molten granites beneath and just to the north of them. Giant clam shells and multitudes of smaller cockle shells can be found in the great ice age erosion canyons which cut through these to the east and north.

In many places on the east slopes of Mt. Lassen and its related peaks these have been preserved from erosion by vast mud flows from the volcanoes. These actually reach into the eastern outskirts of Redding.

But everywhere that I have been able to study glaciers and their paths in the world it is obvious that one must recognize a larger chronology which agrees perfectly with the Biblical material. These glaciers leave their trails or even now lie in their U shaped valleys on thousands of volcanoes and folded mountains which are the result of continental plate separation which began in Genesis 10:25. On Mt. Lassen the now empty U shaped path of a glacier provides the parking lot for those hikers who wish to climb to top of the 11,000 ft. volcano which is one of the most recently active volcanoes in the United States. The curious who will climb the western wall of the little glacier's path will recognize the great scratches and scorings produced when the ice dragged boulders over the layers of volcanic ejecta. The path of that glacier down over the volcanic deposits carves a beautiful lake basin, crosses the road and polishes rock as it passes to the west of Bumpas Hell on its way down into the older caldera which has been blown away. No, in the light of the very clear and God given physical evidence, it is impossible to hold that the ice age caused the Noahic flood. That is to put the frosting on the bottom of the cake for the order of deposition clearly recorded in the record of the rocks requires the reverse order.

But the calculation above of the length of time between the flood and the division of the continents also strikes against the position of those creationists who propose that the division of the earth mentioned in Genesis 10:25 refers to the division of the languages at the Tower of Babel. This utterly is contradicted by the placing of the division of the languages as an event at the end of the second generation of Japhethites in Genesis 10:5. After all, it is clear from the above discussion, including Kainan, that the division of Genesis 10:25 occurred at the beginning of the fifth generation of Semites. Furthermore a careful study of the family of Ham will indicate that in that family only two members of the third generation are mentioned by name before the division of languages is spoken in Genesis 10:20. "These were the sons of Ham, according to their families, according to their languages, in their lands and in their nations." The division after which Peleg was named cannot be the division of languages for they are separated by as much as two generations. And if the chronological material from the Septuagint given above is accurate, and it is confirmed by the quotation of Kainan's (or Cainan's) name from the Septuagint by Luke, then there are approximately 200 years between the Tower of Babel and the division of the landmass above sea level. It is obvious then that the enforced migration from the Tower of Babel, described in Genesis 11:8-9, had been underway for that many years. I will mention before discussing it later that I conclude that Job is Jobab, the thirteenth son of Joktan, the brother of Peleg. That branch of the Semite family had roughly 2 centuries in which to migrate across that territory which now has dried up to become the Arabian desert and settle in close proximity to the territories claimed by the Canaanite branch of the Hamite family. Indeed, these Semites had lived there in the territory that they claimed long enough that the region, apparently north east or south east of the Dead Sea, had come to be known as the land of Uz, the second generation descendant of Shem through his son Aram. And it appears that Jobab or Job, the final son

of the sixth generation of Shem through Joktan, also had chosen to settle there among his Aramean neighbors. Yes, the name Aram still survives in the area to the northeast of Israel.

But this sword apparently is three edged for the argument also makes it obvious that it is impossible to consider the division of the continents and the Biblical ice epoch to be part of the closing events of the Noahic flood. That view presented by Barker simply makes hash out of the physical and Biblical evidence. Job was in the Levant area of the Eastern Mediterranean, in a land settled at least a century previously by near relatives, observing and describing the catastrophic plate movement of the land and the resulting tsunamis in the sea which are mentioned several times unless he lived there during the Biblical ice age. But he was there describing the effects of the cooling temperatures of the "Cenozoic (recent life) Era" This phenomenon, readily identified by the oxygen content of successive layers of Cenozoic shell life, can only be attributed to the phenomenal obscuring of the atmosphere which resulted from thousands of volcanic vents around the world at the same time during post Noahic flood continental movement. Job was there near Israel describing the climax of that worldwide temperature drop which resulted in the Biblical ice epoch in regions farther away from the equator and resulted in catastrophic rains which are referred to in the book of Job. To ignore the massive geological evidence which contradicts this position and to ignore the Biblical evidence while insisting that these events are an integral part of the conclusion of the Noahic flood utterly obscures the actual event series which followed the Noahic flood. In my critique of this fallacious position years ago, I focused primarily on the inability of the view to handle the many unanswered problems of harmonizing the rock record with the Biblical record. So often such harmonization models are born somewhere beneath a hat brim without ever being taken to the field to see if the physical evidence can be correlated or without an analytical study of the contribution of the original text of Scriptures to determine what the text really contributes.

But to return to the statement of Job 30:1-15 (above), a second hint concerning the nature of the period in which Job lived will be found in the fact that Job's counselors clearly are identified as the sons of people who had lived in caves in a time of extreme hardship.

Mankind in that area survived by tooth and toenail, living from the meat that he could kill, often not able to cook that well because wood was not easily available. Because of the absence of the sun's beneficial contribution and lack of well rounded diets which as a result lacked many vitamins, man was affected physically. His frame often was tortured by rickets and debilitating arthritis because of the cold caves in which he lived. Deprived of proper food, his spine and skull were deformed, leaving him stooped with distortions of the skull.

Of course fossil records of these deformities provided fuel for imaginative archaeologists who saw in our ancestors evolutionary evidences which they graphically portray and mistakenly interpret. They miss the significance of the clear evidence of the interbreeding of the strains of modern man and Neanderthal man in the cave life of the northern Levant area and the evidence that this rapidly resulted in modern skeletons in their offspring.

They ignore the fact that the archaeology of these caves records the fact that perfectly modern man and physically degraded Neanderthal man moved into these caves together. They not only cohabiting them but interbreed. With the better diets available farther south away from the grip of the ice catastrophe, rapidly eliminating the physical problems suffered by man farther north. Here they were able to gather wild grains in an area where the ice age precipitation was predominately violent rainfall. The evidence of this promptly became the basis for describing a stone age scene where man now had evolved into a grain gathering stage before he finally got the idea of growing his own grain. Hand in hand with this fallacy went the "stone age" scenario of man's evolutionary development. A fascinating collection of photographs of stone age stone and bone tools and excavation sites, accompanied by the normal evolutionary patter of presuppositions, may be found in Clark's "The Stone Age Hunters" This approach to man's history of course ignored the clear testimony of Genesis 4:22 that man within less than 10 generations after creation was producing tools, not of stone but of brass and even iron. It says this of a man born in the 8th generation of mankind that is recorded in Genesis. "And Zillah, she also bore Tubal-cain, an instructor of every craftsman in bronze and iron: and the sister of Tubal-cain was Naamah." Elements in the following verses suggest to me that Naamah, his sister, was the first rape victim.

How the Genesis statement about early generations of mankind working metal upsets the scheme of man's evolutionary development through a stone age, a brass or bronze age and finally an iron age! I have seen beautiful bronze work in Israel which is dated by the archaeologists themselves as having been made far before the so called "bronze age." I think that it is inescapable that man fully understood and extensively used iron technology until the Noahic flood. I am convinced that, when the Noahic ark finally positively is identified, its fasteners will be made of iron. One reported ark location beneath the surface below Mt. Ararat seems to have metal located at regular intervals that fall within the ark's dimensions. I suggest that the long migration of Noah and his extended family to the Plains of Shinar made it necessary to develop the temporary expedient of stone tool technology on the long journey. And then descendants of that group of travelers from Ararat, when they fled from the Tower of Babel, reverted to stone tool technology on the long journeys across the dividing continents from Babel. I hold that they remembered enough of that stone tool technology which temporarily had been used by their ancestors so that almost identical stone techniques and tools were carried world wide where they still continue to be used in a few remote places. For example, I have a stone flake knife which I bought from a Navajo boy who had brought it from a remote cave in Echo Cliffs in Arizona. It was in association with other pre-Columbian artifacts. Its form is exactly like two such knives that I found lying on the surface in the hills east of Beersheba in Israel where some hunter had dropped them after preparing the game that he had killed. The digging tools and hand axes that I saw in the African Rift in Kenya are remarkably like those found in England and in eastern United States. Excellent pictures of these will be found in Clark. Their common form strongly suggests a common ancestry of the techniques which produced these tools from widely separated areas. They are very similar to so called "pebble culture" implements from Locality I at Choukoutien, China near Peking and like the first illustration of stone implements from "the Australian Early Stone Age."

I consider the book of Job to be the oldest book of the Bible, written no more than 700 years after the Noahic flood and within 200 years after the abrupt and very violent division of the continents in Peleg's day. According to uniformitarian archaeologists that would have been long before man moved from using stone tools to the use of metallurgy. And yet the book mentions bronze four times. "Is my strength the strength of stones? Or is my flesh bronze?" (Job 6:12). "He will flee from the iron weapon; A bronze bow will pierce him through" (Job 20:24)." "God speaks to Job of the great land creature, behemoth. Using a series of metaphors He says: His bones are the beams of bronze, His ribs like bars of iron" (Job 40:18). Then God describes the great sea creature Leviathan which probably was the great sea crocodile which is found fossilized in places around the Mediterranean Sea. "Though the sword reaches him, it cannot avail; Nor does spear, dart or Javelin. He regards iron as straw and bronze as rotten wood" (Job 41:26-27). Three times in these four quotations reference also is made to iron. There actually are five references to iron in the book. The other two references are to an iron pen and to its source. "Oh, that my words were written! Oh, that they were inscribed in a book! That they were engraved on a rock with an iron pen and lead forever" (Job 19:24). Job 28:2 refers directly to the mining of iron and copper. "Iron is taken from the earth, and copper is smelted from ore." Elihu, while rebuking Job, asks him: "Are you able with Him [God] to spread out like metal the expanse [of the atmospheric heavens] with clouds?" (Job 37:18). (The word *rachia*, "to spread out thin, to spread by beating," is used several times of beating metal out into a thin plate. See Exodus 39:3; Jeremiah 10:9. It is used in Genesis 1:6, 7, 8, 14, 15, 17 and 20 of the expanse of the atmospheric heavens below the canopy). Job speaks of gold in Job 23:10. "Because He knows the way with me. When He has tested me, I will come forth as gold." He speaks of silver in 27:16. He values wisdom in this way.

"It cannot be purchased for gold nor can silver be weighed for its price. It cannot be valued in the gold of Ophir, in precious onyx or sapphire. Neither gold nor crystal can equal it, nor can it be exchanged for jewelry of fine gold. No mention shall be made of coral or quartz, for the price of wisdom is above rubies. The topaz of Ethiopia cannot equal it nor can it be valued in pure gold" (28:15-19). "Though he [the hypocrite] heaps up silver like dust and piles up clothing like clay, he may pile it up, but the just will wear it and the innocent will divide the silver."

Again he mentions gold in Job 31:24. If I have made gold my hope, or said to fine gold, 'you are my confidence' When Job had reached the end of his adversity and was restored, his family and friends all comforted him and "Each one gave him a piece of silver and each a ring of gold" (Job 42:11). He in his grief wishes that he might have died at birth and ". . . then I had been at rest with kings and counselors of the earth, which built desolate places for themselves; or with princes that had gold, who filled their houses with silver" (Job 3:13b-15). It should be obvious that Job and those people of the time when he passed through the trials of the Biblical ice age were well acquainted with metal technologies.

In the lands of Israel and Jordan man was living south of the area where great ice fingers continued to cover the highlands of Europe and Asia Minor for decades. It was a time

when the great Jordan Valley was being ripped apart by a great crustal tension rift which extended ultimately to the north to Mount Ararat in the land which we now call Turkey. Its southern extension passed beneath the Red Sea, through Ethiopia, Kenya 6,000 miles to the south of Ararat to the southeast coast of Africa in Tanzania. This rifting of the Jordan Valley is a historical event which, according to geologists, happened during Pleistocene (most recent) times as one of the late scenarios of the division of the continents. Geologists tell us that this rifting of the "African Rift" was a fairly "recent" event. During this event the valley was formed where the Sea of Galilee and the Dead Sea now lie. I have examined the physical evidences that indicate that at one time these two bodies of water were actually joined as a result of the torrential downpours produced in the Eastern Mediterranean lands by the icy catastrophe. That larger lake is called "Lake Lisan" after the "tongue" of land which once extended far out into the Dead Sea from its eastern shore. There are evidences that have suggested to me that at one time Lake Lisan may actually have been an arm of the Red Sea for a brief time. There are many evidences that man lived in that valley as the ice age declined and as that great lake gradually retreated to its present configuration as two lakes. I am of the opinion that Beth Shean was founded by the Philistines when they could travel by ship either from the Red Sea or through the valley of Megiddo before that area finished its uplift stage. And I think that it is highly likely that Jericho may have been founded at the edge of the retreating waters which soon became the Dead Sea. The description of the Jordan Valley given in Genesis 13:10 describes a scene where those retreating waters had left a landscape far different from that found north of the Dead Sea except where it is irrigated today. It says:

"And Lot lifted up his eyes, and beheld all the plain of Jordan, that it was well watered everywhere, before the LORD destroyed Sodom and Gomorrah, even as the garden of the LORD, like the land of Egypt, as you come to Zoar."

d. Elements to consider in Genesis 10:25

Now we have been discussing Genesis 10:25, the first place in the Scriptures mentioning continental division. The verse reads: "And unto Eber two sons were born. The name of the one was Peleg [to divide by water] for in his days the landmass was divided by water" (BEN). There are three elements in my translation which require explanation.

1. In the final phrase I have understood 'ERETZ to have the same meaning that it does in Genesis 1:10 where God gives the name 'ERETZ to the YABBASHAH, the great single continent which heaved up out of the sea at His command on the third solar day. Now 'ERETZ, meaning the whole planet earth, is found in Genesis 1:1. But like the word "heavens," the word "earth" is redefined later in the text. It is obvious that it is not physical planet earth which is divided in Genesis 10:25.

2. And since the root PLG several times has something to do with water, rivers and such, it is only logical to conclude that it is the exposed landmass which is divided by water. Fuerst points out that the Arabic falaj and the Ethiopic plg both mean "river," a usage found in Psalm 1:3 in the plural. The intensive active form of this verb is found in Job 38:25 which asks these questions: "Who utterly split apart a water channel for an

overwhelming flood of waters or made a way for the lightening of the thunder?" (BEN). God's question is best answered by God who did that which is described by the verse. What does it mean? In the light of the Pleistocene (i.e. Biblical ice age) rifting of the Jordan/African Rift valley, there could conceivably be reference to that event, an event which Job possibly could have witnessed. But the verse speaks of a water channel which is filled with a great flood of waters. Now if my suggestion that at one time the Red Sea had a narrow bay which reached even to the north of the present Sea of Galilee, this might be possible. I have suggested that the Phoenicians who were in the land at least by Abraham's time could have been able to sail their ships in through this waterway to found the great city of Beth Shean not far to the south of the Sea of Galilee today. But I think that it is highly unlikely that Job 38:25 has reference to that event. Part of the scenario of Pleistocene times is the opening of the enormous, deep rift valley to the west of the Levant coastline to become the Mediterranean Sea. That huge rift was produced when something extremely catastrophic caused enormous ground waves in the entire crust of the earth. It produced a crack that extends 42,000 miles around the crust of the earth. That great fault passes between Africa and Europe through the Mediterranean Sea. From my limited examinations of the north coast of the Mediterranean and its mountains and the great folded Alps which rim that Sea on the north I conclude that something dreadfully violent broke the great single continent apart between these two continents, then caused them to slam against each other only to drift apart to their present positions. The Atlas Mountains of northern Africa and the Alps are the crushed contact points of these two landmasses which now are separate continents.

3. The name Peleg is based on a Hebrew verb. It is one of several verbs which are based upon the biradical consonantal combination PL. All of these verbs have something to do with division. Adding the third consonant after this biradical combination of consonants differentiates the shade of meaning carried by each of the PL verbs. When the added consonant is an Aleph, the first consonant in the Hebrew alphabet, the basic meaning is "to split, divide, separate" and "to select" or "to distinguish" with meanings that merge on the sense "extraordinary. When the third consonant is G producing the verb PLG, there is a remarkable emphasis upon water. According to Fuerst, basically the verb PLG means "to cleave, to divide, to separate." The basic meaning is the same in Arabic.

Now Greek is a Japhethetic language. And yet I have found 18 different nouns in classical Greek from upwards of 3,000 years ago with the same consonantal pattern PLG. Remarkably every usage has something crucial to do with the sea. Two of these words still crop up in English the expression "pelagic depths" and in the word "archipelago." The root is modified to PLK with the result that division by an ax becomes the dominant meaning. The English noun "Pelican" derives from this pattern, describing a bird which spots a fish from several yards above the sea which instantly plunges and splits the sea to catch its prey. I have discussed the remarkably parallel Greek roots and their relation to the several Hebrew roots which also are built upon the biradical root PL in a technical paper having to do with abrupt continental rifting in Genesis 10:25.

We found that a Semitic lad, born during the "utter division of the landmass by water," was named PELEG to commemorate that remarkable event. As I have pointed out, the

English translations of this verse do not carry the same freight of meaning found in the original Hebrew text. I long have concluded that the Book of Job actually is the oldest book of the Bible as far as its date of writing and the time of its activities is concerned. While Genesis discusses far earlier events in earth's history, I say that Job was written more than 25 centuries before Moses wrote the Book of Beginnings. I personally am convinced that Job lived not less than six generations after the Noahic flood. Indeed, I feel that Job actually is mentioned in Genesis 10. One day long ago in my careful study of that passage I stumbled into the awareness that Genesis 10:29 mentions an interesting nephew of Peleg, the thirteenth son of Peleg's brother, Joktan. That nephew's name was YOBAB, transliterated Jobab in English translations. Now Hebrew writers centuries ago tried to identify Job with a YOBAB found in Genesis 36, a descendant of Esau. But in a comparison of the climate clues found there in Genesis 36 with those found in the book of Job, little similarity is found. Indeed there are names found in the book of Job which also are found elsewhere in Genesis 36, but one also should observe a similar overlapping of names when comparing name in the book of Job with the Semitic names of Genesis 10. I have concluded that place names, such as the land of Uz, carry over to Genesis 36 because Esau and his descendants continued to live in the very area where Job and the other descendants of Joktan and other Semitic relatives of JOBAB had settled long before. A study of the identification of present names of cities and places in Israel, preserved for centuries by the Arab peoples while Israel was away from the land, will indicate that place names (and indeed personal names) continue to be used even today in a local area where Semitic people continue to live. I therefore have concluded that the similarities of names in the book of Job to these chapters of Genesis should recognize an identity with Genesis 10 and that their continued use in Genesis 36 was no more than that.

I already have discussed the linguistic basis for comparing Job with YOBAB in the Hebrew texts of Job and Genesis as linguistic variations carried by different family branches within the larger Semitic group. Indeed, the form "Jobab" probably represents the name as found in one of the several languages of the Semitic family found in this area while "Job" or 'IYOB represents the name in another related dialect. Indeed, there is considerable linguistic evidence in the Hebrew text of the book of Job which might possibly suggest that the present text actually is an adaptation or even a translation from another dialect or language that is nearer to Arabic than to Biblical Hebrew. I long have considered the possibility that the journeys of Moses in the region northeast of Egypt while herding sheep for 40 years may have been the means of the survival of this magnificent piece of ancient literature. I certainly would be thrilled if a fragment of Job in another Semitic dialect were to be found! If my postulate that Job is a translation has any validity, then the Book of Job is the oldest example of Bible translation. And it also would be an accurate conclusion that Job actually is the nephew of the man who was named Peleg, so named because the earth literally began its abrupt division of its continental plates at the start of his days on earth at least two centuries after the Tower of Babel forced mankind to begin to populate the entire landmass.

Job's reference to people setting a sea watch almost certainly has reference to the danger of tsunami, earth movement generated tidal waves. "Am I a sea or a tanniyn, [probably a

marauding, marine, meat eating reptile] that you set a guard over me?" (Job 7:12). The reference to the sea creature which would be kept under close watch when its presence threatened coastal peoples also is suggestive of a time when such creatures still existed. Since two large, unknown creatures are described in chapters 40 and 41, this interpretation seems likely. It should be remembered that Saint George, so revered by the Greek Orthodox, gained his notoriety by killing such a creature on the beach near present day Haifa.

Note that if my conclusions concerning the early date of Job are correct, the earth must have at an early time in history experienced major celestial disturbance like that which happened when the sun stood still in Joshua's day. He describes a fierce storm in Job 9:17. "For He crushes me with a tempest and multiplies my wounds without cause. He will not allow me to catch my breath but fills me with bitterness." Again Job speaks of the might of God, apparently describing the power He displays when He collapses a building or perhaps a cave, preventing a man from escaping. Surely He speaks of God's power displayed in a great tidal wave in verse 15. If the Mediterranean Sea were still expanding as it apparently was during Pleistocene or Biblical ice epoch times, then the tsunami tidal waves retreating far out beyond the normal shoreline and then returning violently would have been the order of the day in Israel.

"Behold, He proceeds to break down and it will not come to be rebuilt. He proceeds to shut up over a man but there is no opening [it]. Behold, He proceeds to withhold the waters and they become dry. Then He proceeds to send them forth and they destroy the earth" (Job 12:14-15 BEN).

I have no doubt that Job is likening the way that his three counselors have pummeled him with their fiercely accusing words to the tsunami, that is, earth movement generated tidal waves which are found elsewhere in the book. He says of them: "They break up my path; they further my calamity, They have no helper. They come as broad breakers; Under the ruinous storm they roll along. Terrors are turned upon me. . ." (Job 30:13-15a). In Job 26:10-12 Job uses language which strongly suggests God's mighty power over the sea, even to the agitation of the ocean.

"He drew a circular horizon on the face of the waters at the boundary of light and darkness. (11) The pillars of heaven tremble and are astonished at His rebuke. (12) He disturbs the sea with His power and by His understanding He breaks up the storm."

He then speaks of another powerful, earth reshaping force in Job 28:10. "He cuts out channels in the rocks and His eye sees every precious thing. He dams up the streams from trickling; What is hidden He brings forth to light." There are numerous places in Israel, particularly along the rugged edges of the Jordan Rift Valley, where powerful flows from the massive downpours have carved deep, juvenile canyons that have suffered little maturation in the minimal rainfall which the area now receives. The reference to God's damming up streams is well illustrated by the fact that the Jordan River has been dammed by a great landslide produced by God not long in the past and probably in Joshua's time (Jos. 3:14-17).

Job describes the way that the power of mighty rainfall and rushing waters appear to have prevented any successful agriculture in His day. "The waters wear away the stones. Its torrents wash away the dust of the earth and thus You cause the destruction of a man's hope" (Job 14:19 BEN).

The book of Job has much to say about the remarkable climactic conditions in the land when the book of Job took place. One needs to remember that in much of Israel and Jordan the average winter temperature is about 50 degrees. What would it have been like to have lived here on earth? The fascinating fact is that Job is quite instructive on that point.

But let us consider further the subject of the antiquity of the Book of Job before considering the catastrophic evidences in that book. This book, more than any other book apart from Genesis, gives us information about creation, about Cain and Adam, about angelic sin (which I believe also is mentioned in Genesis 6), about the judgment of the Noahic flood and similar events that happened even before the Noahic flood! But Job clearly writes as one who lived shortly after that great judgment. In this short chapter I will only be able to summarize the evidence for the antiquity of the book of Job for the roots of this information reach deeply into the text and into the language used by the author.

It is amazing to see just how far back in Biblical history the book of Job reaches. For example, Job 15:7 mentions the first two men who ever lived. "Are you the first man that was born....?" Now that would be Cain (and not Adam as most will respond). "...Or were you made before the hills?" This of course refers to Adam. Now all of the world's really great mountains were formed by continental movement after the Noahic flood. What to these words mean? Eliphaz speaks these words to Job as an insult for Job was maintaining that he was righteous even though he had come into a terrible time of trial. Eliphaz in this passage is accusing Job of sin and is making rather harsh statements about him. But do note that his words here certainly imply that Eliphaz recognized that Adam indeed had been made before the hills! Job 26 also mentions the creation. In verses 7-13 several verses contribute to our knowledge of the way that God stretched out the north over the empty place and bound up the waters in His thick cloud. I conclude that the latter statement is an allusion to the canopy of water vapor which existed above the atmosphere before the Noahic flood. A comparable passage would be Genesis 1:2-9. The expression, "compassed the waters with bounds," in verse 10 would refer to the act of establishing sea level in the third solar day of creation. Verses 11 and 13 appear to refer to His activity of arranging the heavens on the fourth day when "By His Spirit He has garnished the heavens; His hand has formed the crooked serpent."

There are many passages in Job that refer to the events of Genesis. Indeed, there are elements in the book that indicate that Job lived very near to the beginning of his own period which was quite uniquely different from earlier days. In Job 8:8-10 Bildad calls Job a hypocrite and tells him that he would discover many valuable things if he would inquire of the former age. "Prepare yourself to search their fathers: (For we are but of yesterday, and know nothing, because our days upon earth are a shadow)." In contrast to

the long lives that had been lived before the Noahic flood (which days are recorded in Genesis 5), Bildad says: "Our days on earth are but a shadow." These people recognized that the lifespan of man no longer averaged over 900 years. Men were living much shorter lives in their own day. Contrasted with the former age, which was over and being forgotten, the lives which Job's contemporaries were living was as if of yesterday. One easily can detect that Job was living near the beginning of a new period of history. That prediluvian period of longevity was a thing of the past. Now I believe that there is strong evidence in the Samaritan Hebrew text and in the ancient Greek Septuagint translation of the Old Testament that approximately 550 years after the flood the division of the continents occurred. I will explain in a later section the evidence that Job lived after that division of the continents. Therefore I have concluded that Job was living well within a thousand years after the Noahic flood. No wonder Bildad spoke as he did about that past era of man's history! But on the other hand, surely he must have known that it was man's unrestrained bent toward sin which brought the great judgment which ended that era!

II. EARTH MOVEMENT IN JOB

But let us return to our theme. Why should one call the book of Job an ice-age book and say that this actually is a document right out of the Pleistocene ice epoch? Well, let us turn to more of the evidence for there certainly is evidence in the book which very strongly indicates that very conclusion. the book of Job is filled with diastrophism, a fifty cent word which simply includes such events such things as mountain building and great earth movements. Catastrophic events are found as early as Job 1:16 where fire falls from heaven destroying all of Job's servants and sheep. Seven thousand sheep were destroyed in one fire-fall from heaven!

Now that who have studied history know about places like Pompeii and Martinique where fire has indeed fallen and has destroyed large populations of people. Pompeii was buried in volcanic ash and only in this century has been excavated. Mount Pelee on the island of Martinique in the West Indies blew up in 1902. Twenty-six thousand inhabitants of St. Pierre instantly were killed by a hot cloud of fiery gasses five miles from the volcano. Two people escaped, one of whom was a man in a dungeon. At the same time, La Soufriere on St. Vincent, 90 miles away, blew up and killed 2,000 people.

Now of course the event found here in Job was supernaturally produced by our old adversary, but it is strongly probable that natural phenomena were used in that Biblical catastrophe which attacked God's righteous man, Job. Furthermore, evidences of catastrophic volcanic explosions are much in evidence in the north, east and south of Palestine. To the north and east there are large lava flows. In the south east in the area where I believe Job lived there are jagged, sharply fragmented volcanic rocks scattered over an area covering many, many square miles. These rocks are distributed so closely that they make camel travel impossible wherever they are found. These appear to have fallen from the heavens during Pleistocene times when the Jordan Valley was rifted and the land was mightily troubled by the influence of the ice age. This is the period which I identify with the events of the book of Job. These scattered rock showers have been a problem for the geologists.

The moving of mountains is prominent in the book of Job. In Job 9:5-7 Job himself testifies concerning God's wisdom and might. He says in verse 4: "He is wise in heart, and mighty in strength...." In verse 5 he speaks of God "Who removes mountains, and they know not: which overturns them in his anger. Which shakes the earth out of her place, and the pillars thereof tremble." There probably is another reference to the destructions of earthquakes in Job 15:28 where Eliphaz speaks again of the destiny of the wicked. "He dwells in desolate cities, in houses which no one inhabits, which are destined to become ruins." We are forced to acknowledge that circumstances were extremely difficult during the centuries when Job was in the land! But listen to this astonishing statement which largely is ignored by readers. "Who commands the sun and it does not rise..." (Job 9:7). Now most creationists accept the statement of the book of Joshua concerning the day when Joshua commanded the sun and the moon to stand still. God responded to his request so that Israel might win her battle over the many city kingdoms which were warring against that nation. It appears to me from Job's statement that he also knew of a day earlier in history when the sun had stood still! The circumstances are not revealed but Job clearly makes allusion to a very catastrophic moment in Levantine history.

Chapter 14 mentions mountain movement in the same fashion. Verse 18 says: "And surely the mountain falling comes to nothing and the rock is removed out of its place." ;Palestine indeed was a catastrophic place during Pleistocene times because of the rifting of the Jordan Valley. At that time continental movement tore apart a great crack in the earth that stretches nearly 6,000 miles long. That of course is but a small crack when compared with the gigantic 42,000 mile long crack which nearly girdles the earth two times. It runs beneath the sea and was caused by continental plate movement. Now the African/Jordan rift valley system has its beginning on its northern end at Mount Ararat in central Turkey. Its southern end runs into the western boundary of the Indian Ocean after dissecting Eastern Africa from north to south. Can you imagine what it must have been like to have lived in the land of Israel at the time when all of this plate movement and rifting of the crust of the earth was occurring?

But let us return at that point to the chronological context when I am suggesting that Job lived in the days of continental division. This is based upon repeated references in the book to crustal upheaval, overturning, volcanism, rifting, violent erosion, tidal waves and even cave dwellers. Here is a sampling of these references. The scientist/empiricist Eliphaz speaks of the judgment of the wicked. "Remember . . . I have seen that they that plow iniquity and sow wickedness reap the same. By the blast of God they perish and by the breath of His nostrils they are consumed" (Job 4:7-9). That he refers to a natural catastrophe is strongly suggested by his statement later in Job 4:18-19.

"He puts no trust in his servants and charges His angels with error. How much more those who dwell in houses of clay, whose foundation is in the dust who are crushed before a moth? They are broken in pieces from morning till evening."

If Eliphaz is speaking of houses which collapse and kill their inhabitants, then this verse is one of several which speak of earthquake and diastrophism. Job's Also worthy of note

is Job 12:22 which appears to be a reference to this very rift valley. God is described in this passage as "...discovering deep things out of darkness, bring out to light the shadow of death." Now this expression, "the shadow of death," or "valley of the shadow of death" repeatedly is associated with a deep, dark valley in the Scriptures. The newly forming Jordan Rift would have been a fearful place to the troubled inhabitants of the land. In Job 28 the process of crustal rifting certainly appears to be mentioned. Job in verse 5 describes both the earth's surface and that which lies below it. "As for the earth, out of it cometh bread...." He appears to refer to the growth processes which produce the grains from which bread is made. "...And under it is turned up as it were fire." How did Job know that? If my identification of Job's period with events leading up to and including the Pleistocene epoch is accurate, Job easily could have observed molten rock flowing from volcanic vents in many places in Israel. In verses 6-11 there is further, very amazing discussion of that which is below the crust of the earth. "The stones of it are the place of sapphires: and it has dust of gold. There is a path which no fowl knows, and which the vulture's eye has not seen. He puts forth his hand upon the rock; he overturns the mountains by the roots. He cuts out rivers among the rocks...." How catastrophic! "...The thing that is hid he brings forth to light" (vv. 6-11).

Further reference to earthquakes appear to be found here in Job 26:11. He recognizes something of the phenomenon of the fierce heat released by the extensive volcanoes that are found all around and in several places in Israel. "Out of the earth bread comes forth but underneath it it is transformed like fire" (Job 28:5 BEN). Job describes God's part in diastrophism in Job 28:9. "He puts His hand on the flint; He overturns the mountains at the roots." Again Job probably alludes to the effects of an earthquake as he describes the degradation of a mountain in chapter 14:18. "And surely the mountain which is falling crumbles away and a rock is removed from its place" (BEN).

Now when one considers the physical evidence for continental division (which apparently only a surprisingly few creationists do), there should be little question that the continents have indeed divided. The geological evidence is absolutely overwhelming. It has backed up to the wall every geologist who had refused to believe the radical, uniformity disturbing theory. Geologists today are staggered by the astounding evidence indicating that the continents were ripped apart at some time in the past. But what was that event like? And what happened after and as a result of that event? That latter subject is actually our matter at hand. But for the moment it is necessary to discuss the results of that division of the continents as they are found in the world and then in the Bible.

When the continents divided and moved to their present locations, this caused great volcanoes to erupt to relieve the enormous heat of friction generated by the movement of the continental plates over the weakened, inner crust of the earth which is called rheosphere. This upwelling heat also caused great bulging uplifts, pressure ridges, folds and even overthrusts to occur. For example, these lie all up our west coast in the Sierras, Klamath Mountains and Cascades. They are found throughout the Central and Northern Rockies and on to the north in the Canadian Rockies. In these Canadian Rockies there are hundreds of great volcanoes. Their trail of peaks that once belched fire red molten rock, steam and ashes extends on through Alaska and out into the Behring Straits. Not a few of

these are still alive and smoldering. These fire formed, slumbering giants stand at great heights along the ragged ridge of the Andes in South America, testifying to the might of the eruptions which belched forth when continental movement still was a major force modifying crustal plate configuration. At one time the world had a living ring of fire with multitudes of places where volcanoes of all sizes were extruding enormous quantities of steam, volcanic ash, pumice, lava and muds.

The results of this volcanism in the atmosphere were phenomenal. It changed the atmosphere completely for an extended time. To show what volcanism can accomplish in the atmosphere, consider Krakatoa, a volcanic mountain which blew up in the 1800's in the far western Pacific basin. This single explosion filled the high atmosphere with ash and pumice. This actually filtered out sunlight so effectively that it dropped earth's surface temperatures as much as two degrees for nearly two years. In the northeastern states this was called the year of no summer. Chickens are reported to have gone to bed at 4:00 p.m. in Kansas because darkness fell so much earlier than normal. One Volcano! Can you imagine what it was like when the continents were dividing rapidly in Biblical times? It is reported that when the valley of 10,000 smokes exploded in 1912, solar energy entering the atmosphere was temporarily reduced by 20 %! Imagine the effect when multiplying that volcanic explosion by one thousand times! Or by 10,000 times!

I have examined the Jordan Rift over much of its length in Israel, Lebanon and Turkey. It is very plain that the valley actually was torn apart. Level layers of strata still lie level in many places on the west side where they were sheared off, literally torn apart from the same strata which continue on the east side of the great valley, sometimes miles away. This great crack in the earth was formed in the crust when God literally overturned mountains, split apart the crust of the earth, and caused great volcanic action in places. Far down to the southeast of Beersheba there is a great depression called Machtesh Ramon that is very close to the rift valley. It apparently is a sunken graben resulting from settling following the opening of the Jordan Rift. In its bottom there are small volcanic pits from which volcanic ash has spewed onto the graben floor. On the northwest end of the Sea of Galilee lies the ruins of Capernaum. There is an excellent collection of olive presses and grain mills which have been carved out of basaltic lava from the large flows north of Galilee which date from the later part of that period.

Job responds to Bildad's sharp accusations that Job did not really know much about God and His swift judgment by referring to the might of God.

"He is wise in heart and mighty in strength: who has hardened himself against Him and has prospered? He removes the mountains and they do not know when He overturns them in His anger. He shakes the earth out of its place and its pillars tremble. He commands the sun, and it does not rise. He seals off the stars; He alone spreads out the heavens and treads on the waves of the sea." (Job 9:4-8).

Can you imagine trying to live in a land that was being being rifted apart? Imagine trying to keep a roof over your head! That trial happens to be mentioned in Job 4:19-21. Eliphaz, one of Job's critics, was reporting on a message that had been given to him by a

spirit being, an event which had scared Eliphaz dreadfully. According to him the spirit had said: "Shall mortal man be more just than God?" (Job had begun to wonder if that were not the case)!

"Behold, he put no trust in his servants; and his angels he charged with folly: How much less in them that dwell in houses of clay, whose foundation is in the dust, which are crushed before the moth? They are destroyed from morning to evening: they perish for ever without any regarding it."

The abrupt destruction of houses and their occupants is alluded to elsewhere. In Job 15:28 there is a reference to those who dwell in desolate cities, in houses which no man inhabited, which were ready to become heaps. Throughout southern Israel there are very old remains of homes. Some of these have been ruined by armies that have come and gone throughout the land. But in the desert area there are many places where there are little piles of stones which are the ruins left when man was struggling to live in little hovels during this catastrophic time, trying to survive. These are identified by archaeologists as "stone age" dwellings. I believe that they are the sad record of man's desperate attempt to survive in the geologically troubled times in which Job lived, the Pleistocene Epoch.

One important aspect of earth movement for which one should search in Job is for continental movement. It is remarkable that God Himself directly mentions the division of the land mass for an overflowing of waters! Early in Job 38 He already has discussed the creation of the earth when He laid its foundations (vvs. 4-7). He reports that the angels were present as observers. He mentions the preAdamic flood, the canopy and the establishment of sea level as discussed in Genesis 1:8 and following. But in Job 38:25 God mentions the post flood division of the continents to show His greatness to Job. He asked Job "Who had utterly divided a watercourse for the overflowing waters." The single word which is translated "utterly divided a watercourse" is the translation of a word found in Genesis 10:25, PELEG. This is an intensive verb form which speaks of utterly splitting apart the land for the overflowing of waters. This is exactly what did happen in continental division. This word is further discussed in a chapter which largely is devoted to the linguistic evidence for continental division.

Now there are numerous so-called legends among man's ancient records which describe what it was like to live during the time when the continents were dividing. For example, Plato describes it in "Critias" and "Timaeus," two of his shorter works. I interpret these two works as the remnants of traditions that were much older than Solon and Plato, traditions which give insight into the events of continental division. If we would listen to man's ancient records, we would have near eye-witness accounts concerning what it was like here on earth when man was migrating from the tower of Babel under the duress of great plate movements which eventually isolated many of the peoples which came to populate them. These near-eyewitness accounts also would provide us much forgotten material about what happened when the Biblical ice age arrived and what caused it.

III. TIDAL WAVES IN JOB

In the book of Job there also is literary evidence which indicates that the sea near the scene of the book was greatly disturbed. When the reader of the book becomes aware of its remarkable statements about the sea, it opens the door of his understanding concerning life in the land which became Israel during the centuries when the continents were dividing. Job was a desert dweller judging from the pastoral scenes which clearly are described in the book. In spite of this fact, the book repeatedly mentions the sea! Now it is open to question whether the book is referring to the Mediterranean Sea, the Red Sea or to a body of water which lay much closer to southern Transjordanian territories where Job appears to have lived. There was such a body of water in Israel where only the remnants of that body can be found today. I have examined the Jordan Rift several times in visits to that area. I have been forced by the evidence there to recognize that the scientists are correct when they say that a giant lake filled all of the Jordan Valley during Pleistocene times. This was not merely an enlarged Dead Sea, which easily is recognized by the many fossil beaches that lie above present lake level. It was a sea that filled both the Sea of Galilee to the north and the Dead Sea, joining them in a great lake that left beaches hundreds of feet above the present level of the Jordan River which joins them. Even today one may find the terraces and beaches which were left by that great body of water. These beaches are a testimony to the violence of the climate of that time.

On to the north in northern Turkey, in present day Russia and across Europe the land was gripped in a fierce winter that may have lasted for several generations. Along the borders of the Mediterranean at lower altitudes phenomenal rainfalls were carving great erosion channels. It was very cold in the Levantine countries along the eastern Mediterranean. In this area the land rises from 3,000 to 9,000 feet in some of the great compression ridges which parallel the coast. Here there was much snow, but it apparently rained much more than it snowed in the area of present Israel. The erosion from this rainfall and snow melt sliced canyons in the steep slopes. It carved caves as the water worked its way through the soft limestones of the area. To these caves man turned for housing just as he did in Europe during the "ice age." Some of the great chronological misapprehensions concerning "the stone age," "the Chalcolithic age," the bronze age" and "the iron age" are derived from the application of evolutionary dogma to the physical record of man's trials during the climatological catastrophe which is recorded in the book of Job.

In Job 6:3, Job mentions the sand of the sea. In Job 7:12 he asks his critical counselors: "Am I a sea, or a whale that you set a watch over me?" Now these critics of Job were sitting around him and staring at him for days on end, trying to convince Job that he was a great sinner. This was so that they might be able to explain why he had been judged so severely. Now the Hebrew word translated "whale" here is the same word used in Genesis 1:21: "...God created great TANANEEM...." It also is the word used by the Psalmist in Psalm 148:7. Here and elsewhere in the Bible it has been translated "dragons." The word actually refers to all great marine creatures. I am confident that the meaning of the word extends beyond "whales" to include such creatures as the many types of dinosaurs which also are creations of God. Apart from the strictly marine varieties, these would have been created on the fifth day of creation.

Job's complaint is strange, isn't it? Why does he say: "Am I a sea, or a great sea monster, that you set a watch over me?" The answer lies in the troubled times of Job's day. It is obvious from chapters 40-41 that, contrary to evolutionary beliefs, some kinds of dinosaurs were still a problem to man. The recent discovery of a rotting Pleisosaur in the nets of a Japanese dredge trawler near New Zealand indicates that at least one kind of marine, dragon-like creature has survived even into modern times. If one desired to know more about human contacts with the great reptiles, as mentioned here in Job, then he should research man's many parallel "legends" of his contacts with the "dragons." One might even find relevant material in the Levantine story of St. George and the dragon and the battle which took place not far from the present city of Haifa in northern Israel. He might also find stimulating research material in the Psalmist's description in Psalm 73 of the way that God cast great marine creatures up to become food for those people who lived in the wilderness.

Indeed Job appears in Job 7:12 to make reference to another marine factor which obviously troubled inhabitants along the sea coast. For some reason those people who lived along the coast of the sea "set a watch" over it. The reason for that action to which this desert dweller refers could only be because the Mediterranean Sea and smaller bodies of water in the area were greatly agitated at that time. I have concluded that it would have been easy for Lake Lisan which lay in the Jordan Rift to have been connected with the Red Sea to the south for some time. If crustal spreading movement were still continuing while these waters were deep in that rift valley, they would have been agitated dangerously for those living near its shores. But the Mediterranean Sea also has suffered similar disturbance. That sea was almost continually dashing back and forth during the spreading of the great rift valley which is the Mediterranean Sea basin. That disturbance carved massive beaches late in geological "time," probably even into the life of Abraham. The giant beaches left by the tsunami or crustal movement generated tidal waves may be traced well above sea level in the wide, shoreline plains left by the oscillating waters in softer materials. The power of the waves is recorded in the steep, rocky cliffs which originally were at sea level where great waves pounded. These are particularly visible along the coast in the bluffs along Northern Israel, Lebanon, Turkey in Greece and somewhat inland in Egypt. I have seen them from the air along the coast of Tunisia.

It is difficult for us to imagine the violence of the sea's disturbance in such a humanly inconceivable violent crustal movement as would eventually produce the Atlantic Ocean. Plato reports through Critias the story which Solon brought from his exile in North Africa. In it is described a time when the great landmass which was called "Atlantis" disappeared from the sight of those in the Old World, apparently sinking into the sea within a single year. The sea is described as being so filled with pumice, foamed volcanic rock which floats, that ships were not able to explore what had happened for some time. I am convinced that, for the most part, these works of Critias and Timaeus contain memory fragments which describe the violence of the division of the continents in historical times.

Evidently Job lived along the shoreline of his day. He describes what it was like to live in the eastern Mediterranean coastline lands when tidal waves were roaring ashore, generated by great crustal movement. "...He breaks down, and it cannot be built again: he

shuts up a man, and there can be no opening. He withholds the waters and they dry up; also he sends them out and they overturn the earth!" This describes exactly what happens when a tidal wave approaches the coast. First of all the waters along the coast begin to retreat. In Crescent City, California, the citizens had been forewarned about the soon arrival of a tidal wave which had been generated by the Alaskan earthquake which struck Anchorage so severely. They "set a watch over the sea!" They did this because they knew that, when the waters began to retreat and the beach receded far out onto the ocean bottom, they were in immediate danger. The great waves were preparing to recoil and come racing in to crash against the continent. That is exactly what did happen. The shoreline moved seaward. Fishing boats that were anchored far out where the fishermen thought they would be out of danger were seen sitting upon the shallow sea floor. The last rescue workers who feverishly were trying to empty stores along the shore now raced for high ground. The tidal wave then came roaring through the lower streets of Crescent City and did terrible damage. However, because men wisely had "set a watch over the sea," practically no human lives were lost.

Surely this catastrophic phenomenon is being described by Job. "...He withholds the waters and they dry up: also he sends them out and they overturn the earth." I do not think that men in Job's day fully understood what tidal waves were. They simply are waves which have been set in motion by movement of the crust of the earth beneath the sea. In Alaska there is a small bay where abrupt movement in a fault beneath the surface of the bay produced a jet of water which knocked down trees for over 800 feet up the mountainside above the bay. One fishing vessel in the bay was completely destroyed. Another rode the tidal wave which swept up over the great trees on the bar which protected the bay. That vessel rolled upside down as it passed over the trees and, amazingly enough, survived when it was dumped in the ocean outside of the bay. Job may further mention tidal waves in Job 14:11. "As the waters fail from the sea and the flood decays and dries up, so man lies down...." This seems to be an illusion to coastal waters failing and retreating before a tidal wave attacks the shoreline. It is apparent from Job 7:12 that men learned how to protect themselves from tidal waves by setting a watch over the sea.

Eliphaz also refers to the trying times in which the main characters of the book of Job lived. In effect he says to Job: "Just because it is continually dark and very cloudy, do you think that God will not be able to see through the clouds and see your sins?" (Job 22:11-13). He also makes reference to over flooding waters. "Therefore snares are round about you and sudden fear troubles you; Or darkness, that you can not see; and abundance of waters cover you" (v. 11). That gives us some idea of what it was like in Job's day! "And you say, how does God know? Can he judge through the thick cloud?" It is obvious that the earth had an unnatural cloud cover in those trying days!

If I am correct in my conclusions, the whole world had great quantities of pumice and steam filling its atmosphere. As a result of the earth's changed albedo or increased reflectivity because of the great cloud cover, the sun's rays began to bounce off without penetrating to the earth's surface to warm the atmosphere. Temperatures began to drop swiftly under that cloud layer until it began to rain heavily from the enormous load of

humidity which was pouring from the thousands of steaming volcanoes. It began to snow at higher elevations and at higher latitudes. The atmosphere was receiving a constant supply of steam which was roaring out of the thousands of active volcanoes. These were relieving the incalculable heat generated by continental movement which was venting through broken and weak sections of the moving continental plates. This almost limitless supply of atmospheric moisture continued to reduce surface temperatures until the seas in the polar regions dropped below the freezing point. It also provided a constant source for torrential rainfall where that was possible and snows which built up to hundreds and even thousands of feet in many areas. Are you surprised that your ancestors did not spend much time recording the unbelievable experience in which they struggled for very survival? Yet the caves of the world contain the archaeological record of those descendants of Adam, some of them your own ancestors, as they faced almost insurmountable odds in that battle for survival.

Eliphaz further accuses Job in the book of Job of believing that: "Thick clouds are a covering to him, that he does not see...." He reminds Job of the certainty of judgment by referring to an event still fresh in mankind's collective memories when he says: "Have you not marked the old way in which wicked men have walked? They were cut down out of time, whose foundation was overflowed with a flood." Now this may be a reference back to the Noahic flood, or it simply may be a reference to the destructive forces of the great tidal waves which were going and coming. Indeed, the Hebrew word for a flood here could even refer to a river flood, so the reference is not certain to us. Elsewhere Job does refer to tidal waves in a dramatic simile as he describes his three "friends" (perhaps better described as his "critics"). He speaks of these younger men who were around him saying: They "mar my path; they set forward my calamity.... They came upon me as a wide breaking in of waters: in the desolation they rolled themselves upon me" (Job 30:13-15). Surely Job is likening the criticism levied against him by these men to a tidal wave!

I have followed the great, elevated beaches left by catastrophic waves like those mentioned in this great poetic book out of the Biblical ice age from Mersin, Turkey on that land's warm, south facing coast, the cotton belt of Turkey. All of the way along the coast to the east and then to the south into Egypt the sea shore displays the remnants of the great Pleistocene beach where giant waves once pounded continually. That entire area has been uplifted today so that this beach lies well above sea level. The harsh pounding of the waves has ground the rocky shore materials so finely that much of that area, which reaches up to the Shephelah in Israel, is rich, finely broken farming soil.

V. COLD WEATHER IN JOB

But let us turn to the evidences in the book of Job which point to severe climate problems. We have just scanned the words of Eliphaz in Job 22:11-14 which described the dense clouds which covered the land of Palestine everywhere at that time. There are many references to rain in the book of Job. Job 28:10-11 is one of many references to tempests and storms that could snatch up people and actually carry them away. Such violent storms would have been common near the great ice sheets and mountain glaciers

which dominated much of Europe and the highlands of Asia Minor during the ice age. Years ago I had a friend who lived in New Zealand for a time. This is not far north of the Antarctic where there is a giant ice cap today. As a result, weather in the mountains of New Zealand can be very tumultuous. My friend and his son were camping in the mountains on one vacation. They almost were completely washed away by a violent rainstorm, losing everything and barely surviving in the torrential rains. Now a close reading of the book of Job will certainly suggest similar circumstances. Famine, crop failure and violent floods are common themes in this remarkable book of the desert!

But perhaps one of the most interesting things pointing to an ice age environment for the book of Job is the fact that there were cave men in his day. They actually are clearly mentioned in the book in such a way that it helps us to see that cave men are a part of the Biblical story. Our children constantly are harassed with the idea that man evolved through the cave man stages to his present glorious height of evolutionary development. But Job gives us a very good idea of what actually happened. In those days when the division of the continents and the consequent ice age were occurring, Job 30 reveals that the ancestors of Job's three friends all had been cave men! Job has reviewed in chapter 29 the way that God had blessed his life when he had been wealthy. In his misery of poverty and suffering he says: "But now they that are younger than I have me in derision, whose fathers I would have disdained to have set with the dogs of my flock" (Job 30:1-2). That sounds rather nasty for him to say of his three critics, but Job explains: "For want and famine they were solitary; fleeing into the wilderness in former time..." (that is in the generation immediately before their present). He continues describing the fathers of his three friends "who cut up mallows by the bushes, and juniper roots for their food." Imagine! They were cutting up anything that they could find for food, even roots and bushes! Adding to their starvation was the agony of being rejected and homeless. They were forced "...to dwell in the cliffs of the valleys, in caves of the earth..." (v. 6). Why? Because these men of the generation before Job simply couldn't keep a roof over their heads, couldn't cultivate grain and couldn't find food for their families. Job describes in 15:18-19 the impossible farming conditions when the rain would wash their crops right out of the ground.

Today the archaeologist studies the evidence found in the garbage dumps of their caves and he wrongly concludes that man had evolved through the old stone age down to the present. All that he is actually seeing is the fact that man turned from a tool technology of iron and brass to develop a more expedient stone tool culture for their dire circumstances. He made them poorly at first, then better as he learned to use flint as a temporary substitute for metal tools. His improvement in making stone tools and later returning to the metal technology known since Genesis 4 is misinterpreted by the archaeologist as evidence of evolution! In reality, man couldn't keep the fires going effectively and couldn't mine the metals in order to make the tools first invented by the descendants of Cain (Gen. 4:22). Metals such as iron, lead, brass, silver, and gold repeatedly are mentioned in the book of Job. (Note 2:24-29; 6:12; 19:24; 20:24-25; 41:1,7; 42:11 and others).

But during the post-flood ice age, they began to use stone because it was so easily obtained and worked. By striking a couple of rocks together they could make a knife. When finished, they threw it away. When one needed another tool, he readily made another. One day I was exploring a little hillside on the road leading from Beersheba toward Ashdod on the coast of Israel. While others of my tour group were planting trees in the wilderness, as I mentioned earlier I picked up two very nice little flint knives. They are remarkably similar to another Pre-Columbian knife that I obtained from Echo Cliffs east of the Grand Canyon. Normally, similar patterns of development of stone technology developed in diverse areas. Nevertheless, occasionally a brilliant contributor among a people took the stone technology to heights never achieved by other peoples.

Never overlook the evidence that Job lived in a time of intense cold. God Himself in a conversation with Job refers to the day when the sea actually froze over (Job 38:30). "The waters are hid as with a stone, and the face of the deep is frozen." the Hebrew word translated "deep" here has reference to the sea. It is the same word found in Genesis 1:2 and in numerous other passages, almost always referring to the deep ocean. Which sea is this? We cannot tell. The Omniscient one could be referring to the polar regions. I have seen the sea frozen over for more than 100 miles out to the east of Greenland in the month of May. Or He could have been referring to a large local body of water like Lake Lisan which I have described as lying in the Jordan Rift. In any case, the sea could have frozen over only one time in history and that was during the Pleistocene, Biblical ice age! It was not about one million years ago but about 5,000 years ago.

When this fact is recognized, the impact of the many references to snow, ice, freezing, hail and storm in the book of Job become significant. Job speaks of violent storms. "And suddenly a great wind came from across the wilderness and struck the four corners of the house, and it fell on the young people, and they are dead; and I alone have escaped to tell you" (1:19). Job describes this catastrophe which may overtake a wicked man.

"Terrors overtake him like a flood; A tempest steals him away in the night. The east wind carries him away and he is gone. It sweeps him out of his place. It hurls against him and does not spare; He flees desperately from its power" (27:20-22).

Rain is a remarkably common topic for a desert dweller in a land where rainfall today in some areas averages between one-half and four inches a year. Snow, ice and freezing will be observed frequently in a careful reading of the book. Compare 6:15-18; 37:6-11 and 38:26-30. Even in God's reference to the now apparently extinct creature called leviathan (41:1-34) and another called behemoth (40:15-24), the book appears to be pointing to its own antiquity and to the remarkable period in which Job lived. It is my untested opinion that the Hebrew plural noun behemoth may be referring to the giant hornless rhinoceros "Baluchitherium," fossils of which have been found in the near East where Job lived. It apparently became extinct through the climatic and human pressures of the Biblical ice age. The creature stood tall enough that a man easily (but unwisely) could have walked under its abdomen.

Leviathan very likely was one of the giant marine reptiles which had survived the Noahic flood as a creature well adapted to the sea. Skeletons of these giant crocodiles have been found several places in Africa. I saw the 6 foot long skull of one in Niamey, Niger. Imagine how long he must have been! I estimated that this particular croc was over 30 feet long. Once again, it probably was the climate changes as the Biblical ice age closed brought its extinction in the swift and very difficult movement of the several centuries of catastrophism which followed the Noahic flood. My observations of the huge Niger River bed left by the Biblical ice age flow of violent rain storms out of west central Africa agreed with the conclusions of scientists who hold that during the ice age the central part of the continent of Africa received enormous rainfall while the southern part actually was glaciated. The country of Chad largely is a giant lake bed. Lake Chad is but a frail remnant of the enormous lake basin which left its huge beaches in an area which now lies on the edge of the Sahara Desert. I have flown over this area in different directions repeatedly in my translation consultation work on four Tchadian languages with Bibles International.

In Kenya there also are beaches from the giant lakes which the enormous Biblical ice age precipitation produced in the African rift. Lake Naivasha, which I have examined, is today a large lake in the Rift Valley. As I remember, it lies about 600 feet below the giant beaches of the lake which covered many square miles in the day when Job lived near the same great rift valley where it passes between Israel and Jordan. In one location on great beach on the eastern side of the fossil lake there are many stone tools which have been fashioned by man migrating southward from the catastrophic, linguistic event which we call Babel. When I examined the walls of a more juvenile creek which sliced through the layers of the ancient beach, it became obvious to me that migrating man, who knew the technology of fashioning metal tools according to Genesis 4, was forced to turn to a stone tool technology under the long progression of events following the departure of the Noahic family from Mt. Ararat. Here on the beach of ancient Lake Naivasha and on the banks of another lake not many miles to the south migrating man paused where there was a good supply of volcanic rock which was well adapted to tool making. Man's art, left on rock walls and in the caves of the southern African Rift, plainly show that the climate of the area was vastly different than it is today. Post-Noahic flood man, migrating through the area, pictured many different kinds of animals which could not possibly live in the arid area today. At the gulch on the eastern shore of ancient Naivasha there are stone tools still protruding from the sides of the nearly vertical walls. I concluded that the tools and the tool making site were buried by a fierce flash flood which swept down from the eastern rim of the rift valley.

Much later, after the lake had retreated toward its present size, another flash flood from the same source produced a small but violent stream which now exposed the buried tools. At the lake bed to the south, where Leakey discovered about 1,000 man made stone digging tools and a few bolo stones, evidences of an entirely different scenario are preserved. Here migrating man camped by the lake and exploited a good source of volcanic rock for making digging tools. A veritable factory was in progress for there are digging tools in several stages of manufacture. I do not think that it is inappropriate to imagine a store by the Rift Valley migration route where travelers could barter for nicely

shaped digging tools that were 6 to 9 inches long. After all, the migrants needed these to dig roots and chop the meat of an occasional kill as they continued traveling south. There actually is the shattered skeleton of a large animal near the tool factory. It showed evidences of having been chopped apart by tools like those which still lie in abundance at the place where they were manufactured. At this site it was a fierce volcanic ash eruption from one of the Rift Valley's many volcanoes which drove man out of the area and buried the factory by the migration highway from Babel out of business. The lake by the tool site and the surrounding area was covered by many feet of volcanic ash which largely has been removed by erosion from the greatly reduced precipitation of the area in the centuries which followed. It is fascinating to walk among the many hundreds of tools which still lie where they were dropped as migrating man, fleeing from the linguistic catastrophe at Babel, now was forced to flee from a local geological catastrophe.

A geological sidelight also may be seen along the ancient beach line of old Lake Naivasha. There is an enormous diatom deposit on the eastern shoreline. To me that indicated that the ancient lake, enormously enriched by the silicas of volcanic ash explosions, enabled this microscopic creature which collects silica for its beautiful shell, was able to produce its own explosive multiplication, literally filling the lake with the beautiful little creations whose skeletons now form a deposit that I remember as over 200 feet thick. A similar phenomenon lies northeast of Burney, California on the southeastern end of the Klamath Mountains where these begin to merge into the Sierras. Ice age lakes in that area, enormously enriched with silica by the explosions of Mt. Shasta, Mt. Lassen and hundreds of other volcanic vents that were exploding in the area, now contain beautiful white diatomite beds testifying of the violence of the day in which they lived, the somewhat extended day in which the west coast of the United States was being crunched up out of the eastern Pacific floor. In this area where I live we have great limestone beds, now often inclined eastward at 45 and more degrees. They appear to me to have been disturbed, uplifted and tilted when the great calcium beds of the stabilization period of mid-Noahic flood times were forced upward out of the sea because of abrupt plate movement pressures. And I conclude that the formation was only partially indurated when this movement began.

But it also appears that continuing movement, perhaps over several centuries, produced massive fractures roughly parallel to the present coast and then lesser fractures perpendicular to these. This limestone was deposited in the sea at least several centuries before the division of the continents produced their uplift, distortion and fracturing. And it probably was in the few centuries that followed that the ash falls in the inland lakes produced the remarkable diatom bloom evidenced there by the diatomite beds. And a similar scenario is indicated to me by the event series recorded in the great African Rift valley in Kenya, Israel/Jordan Syria and Turkey where I also have examined it. Man was in that rift valley while it still was fiercely active volcanically and while the pluvial violence of near equatorial regions was still very strong. That was not at the close of or even a part of the Noahic flood catastrophe. This is evidence of two more crucial, earth shaping catastrophes which followed the Noahic flood and must be recognized by creationists as distinct events.

Very few visitors who travel to Israel and Jordan recognize the evidences left by the powerful, Biblical ice age precipitation in the days of Job. They drive across ancient beaches in the edges of the great, 6,000 mile African Rift Valley as it passes through Bible lands. They drive along the shores of the remnant lakes which still lie in that valley without recognizing that the Biblical ice age could not possibly be part of the Noahic flood. Here too there is evidence that man had migrated to this area while the fierce rainfall and snowfall described in the Book of Job still was falling. But a careful examination of the Jordan Rift, as it is called in Biblical lands, will show that these shoreline beaches actually connect the Sea of Galilee and the Dead Sea. The beaches record the fact that ancient Lake Lisan, as it is called by geologists, was a major factor in those days of man's migration from the Tower of Babel. I have no doubt that much of the lake was still there in the days of Job for the Biblical evidence strongly suggests that the Biblical ice age was well into retreat by Job's day. Remember that Job's three counselors, Eliphaz the Temanite, Zophar the Naamathite and Bildad the Shuhite, were the sons of people who lived in caves and dug roots for food according to Job 30:1-15.

The book of Job perfectly fits into the retreat stages of the great, ice catastrophe which followed the Noahic flood and the five generations which lie between the flood and the division of the continents. It was the tensions of this very abrupt, post-Noahic flood division of the continents which ultimately produced the great African Rift valley which stretches from Tanzania to Mt. Ararat in Turkey. The fact that man was migrating southward from the Tower of Babel through the volcanically warmed Rift Valley during the violent rainfall of that area during the Biblical ice age should alert the creationist to the fact that it is impossible to make the division of the continents and the Biblical ice age a part of the close of the Noahic flood. The fact that Job and his counselors continually refer to the continuing atmospheric and geological violence of the period in which Job lived demonstrates that the division of the continents and the directly resulting Biblical ice age follow the Noahic flood by not less than 6 or more centuries. Suddenly my own conclusion that that righteous man Job actually began his life in the 6th generation after the Noahic flood fits the evidence remarkably well. My proposal that Job actually is Jobab, the 13th son of Joktan who was the brother of Peleg appears to have much evidence in its favor. The fact that every child named in the several generations following Peleg's birth is given a name which could have catastrophic overtones also appears to give supporting evidence.

A final piece of evidence which helps us to locate Job in Genesis history is the final statement of the book. Job lived to see the fourth generation of his offspring after his great trial (Job 42:16-17). This suggests that the length of the generation now was decreasing rapidly because of the removal of the pre-flood canopy. This great shield of water vapor above the atmosphere had protected prediluvian man from the high energy radiation which now steadily enters our atmosphere. It made possible the great generations which averaged over 900 years as described in Genesis 5.

The book of Job is a fantastic book. It is accurate in all that it says about earth's history. If we will use this book, we can understand so much better what happened in early Biblical history. Furthermore, an appreciation of the remarkable statements made in this book

about events in the retreat of the Biblical ice age will do much to expose the chronological errors of those who look at the physical record of earth's history through the lenses provided by evolutionary occultists.

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